BOBBY JINDAL
GOVERNOR

PEGGY M. HATCH
SECRETARY

State of Louisiana

DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL SERVICES

File Number: LA0042188
AI Number: 19267
PER20120001

United States Environmental Protection Agency, Region 6
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202-2733

Attention: Ms. Evelyn Rosborough

Subject: Preliminary Draft Permit for the City of Shreveport, North Regional Wastewater Treatment Plant.

Dear Ms. Rosborough:

The enclosed preliminary draft package is being submitted in accordance with the terms of the Memorandum of Agreement (MOA) between the Louisiana Department of Environmental Quality and the U.S. Environmental Protection Agency, Region 6.

PERMIT NUMBER	FACILITY
LA0042188	City of Shreveport, North Regional Wastewater Treatment Plant

Please acknowledge receipt of this preliminary draft permit via fax at (225) 219-3309 or via email at ronda.burtch@la.gov. In accordance with the MOA, the Agency has thirty (30) days to submit comments regarding the preliminary draft. Please send official comments to Mr. Sam L. Phillips, Assistant Secretary, at the following address:

Sam L. Phillips
Assistant Secretary
Office of Environmental Services
Post Office Box 4313
Baton Rouge, Louisiana 70821-4313

It would be appreciated if you could also send a copy of your comments to me. If you have any questions regarding the enclosure(s), please contact me at (225) 219-3211 or e-mail address ronda.burtch@la.gov.

Sincerely,

Ronda Burtch, ES
Municipal and General Water Permits Division

Enclosure(s)

ec: Permit Compliance Unit
Northwest Regional Office
Office of Environmental Compliance

Supervisor, Louisiana Field Office
US Fish and Wildlife Services

Melvin C. Mitchell, Administrator
Water Permits Division

DRAFT

PERMIT NUMBER: LA0042188
AGENCY INTEREST NO.: 19267
ACTIVITY NO.: PER20120001

DEQ
LOUISIANA

OFFICE OF ENVIRONMENTAL SERVICES

Water Discharge Permit

Pursuant to the Clean Water Act, as amended (33 U.S.C. 1251 et seq.), and the Louisiana Environmental Quality Act, as amended (La. R. S. 30:2001 et seq.), rules and regulations effective or promulgated under the authority of said Acts, and in reliance on statements and representations heretofore made in the application, a Louisiana Pollutant Discharge Elimination System permit is issued authorizing

City of Shreveport
North Regional Wastewater Treatment Plant
P.O. Box 31109
Shreveport, LA 71130

Type Facility: publicly owned treatment works serving part of the City of Shreveport

Location: 2303 North Regional Road in Shreveport, Caddo Parish

Receiving Waters: Red River (Outfall 001) (Subsegment 100101) and Twelve Mile Bayou (Outfall 002) (Subsegment 100304)

to discharge in accordance with effluent limitations and monitoring requirements, narrative requirements, other conditions, and standard conditions attached hereto.

This permit shall become effective on _____

This permit and the authorization to discharge shall expire five (5) years from the effective date of the permit.

Issued on _____

_____
Sam L. Phillips
Assistant Secretary

DRAFT

GUIDANCE TO UNDERSTANDING THE WATER PERMIT FORMAT

Components of the Permit Report

General Information Sheet - A summary of the facility information, such as all permit and ID numbers, facility physical and mailing addresses, latitude/longitude at front gate, facility contacts and phone numbers, Standard Industrial Classification (SIC) and North American Industry Classification (NAICS) codes.

Inventory Sheet - Lists all subject items and descriptions, any relationships that may exist between subject items, and any alternate identifications for the subject items.

Effluent Limitations and Monitoring Requirements - Subject Items are listed including Parameters, Discharge Limitations and Units, Sample Type, Frequency, and Which Months. See example below.

Parameter	Discharge Limitations							Monitoring Requirements		
	Quantity / Loading Average	Quantity / Loading Maximum	Quantity / Loading Units	Quality / Conc. Minimum	Quality / Conc. Average	Quality / Conc. Maximum	Quality / Conc. Units	Frequency	Sample Type	Which Months
TSS (Total Suspended Solids) 00530[A] 1[B]	1025	1350	lbs/day	*****	30	45	mg/L	quarterly	grab sampling	All Year

Footnotes:

A Number identifying the STORET code.

B Number identifying monitoring location.

Narrative Requirements - All applicable narrative requirements for the entire Agency Interest (AI) appear in text form. Submittal Actions and Narrative Requirements for each Subject Item follow the Agency Interest narrative requirements.

Definitions

Agency Interest (AI) - Any entity that is being regulated or is of interest to LDEQ

Agency Interest (AI) ID - Numerical identifier of Agency Interest (AI)

Activity Number - Each action taken for an Agency Interest (AI). This identifier consists of a total of 11 characters, 3 letters represents the regulatory program followed by four digits representing the year the application was received by LDEQ, and four digits which are sequentially assigned. Example PER19990001, this would identify the activity as the *first permitting* action taken for this Agency Interest (AI) in the year ***1999.***

Phases – Periods during which the associated requirement applies to the particular parameter. *For Example,* if the permit contains a compliance schedule with interim limits, this column will state the phase in which the compliance schedule of the associated requirement is applicable.

Subject Item (SI) - Components or groups of components of an Agency Interest (AI), including the Agency Interest (AI) itself. Each Subject Item is defined by a category and a type. Note: The type does not appear in the Subject Item ID.

Subject Item ID - Identifier assigned sequentially to each Subject Item within an Agency Interest (AI). It is composed of three letters representing the category of the Subject Item and is followed by the sequentially assigned number. Example RLP 1.

Which Months - Denotes the months that have a particular parameter requirement. This is usually used for seasonal limitations.

General Information Sheet

AI ID: 19267 - Shreveport City of - North Regional WWTP

Alternate Identifiers	Name	User Group	Dates
72-6001326	Federal Tax ID	Federal Tax ID	11-21-1999
LAR05M788	LPDES #	LPDES Permit #	07-16-2001 - 02-08-2012
LAR05B306	LPDES #	LPDES Permit #	06-02-2000 - 09-28-2000
LA0042188	LPDES #	LPDES Permit #	03-01-2002
WP2040	LWDPS #	LWDPS Permit #	06-11-1990 - 02-28-2002
	Priority 1 Emergency Site	Priority 1 Emergency Site	07-20-2006
H-286	Septage Hauler	Sewage Sludge Hauler	12-15-2009
	Sewage Sludge Receiving Facility	Sewage Sludge Receiving Facility	10-13-2009

Physical Location: 2320 N Regional Rd
Shreveport, LA 71107

Mailing Address: PO Box 31109
Shreveport, LA 711301109

Facility Email: Ray.Mack@shreveportla.gov
Main FAX: 3186737694
Main Phone: 3186737681

Location of Front Gate: -93.790556 longitude, 32.526944 latitude

Related People:	Mailing Address	Work Phone	Email	Relationship
Josephine Loston	PO Box 31109 Shreveport, LA 711301109	3186737690		Accident Prevention Contact for
Ray Mack	PO Box 31109 Shreveport, LA 711301109	3186737690	Ray.Mack@shreveportla.gov	Sewage Sludge Hauler Contact for
Ray Mack	PO Box 31109 Shreveport, LA 711301109	3186737690	Ray.Mack@shreveportla.gov	Water Permit Contact For

Related Organizations	Mailing Address	Work Phone	Relationship
City of Shreveport	Attn Env Affairs Mgr Shreveport, LA 711011109	3186737660	Accident Prevention Billing Party for
City of Shreveport	Attn Env Affairs Mgr Shreveport, LA 711011109	3186737660	Owns
City of Shreveport	Attn Env Affairs Mgr Shreveport, LA 711011109	3186737660	Water Billing Party for

SIC Codes: 4952, Sewerage systems

Note: This report entitled "General Information" contains a summary of facility-level information contained in LDEQ's TEMPO database for this facility and is not considered a part of the permit. Please review the information contained in this document for accuracy and completeness. If any changes are required, or if you have questions regarding this document, please email the Permit Support Services Division at facupdate@la.gov.

Renewal Application Permit - Inventories

AI ID: 19267 - Shreveport City of - North Regional WWTP
Activity Number: PER20120001
LPDES Permit Number: LA0042188

Subject Item Inventory:

TEMPO ID	Designation	Description
FAC 1	LA0042188	Water Agency Interest
RLP 1	Outfall 001	Treated sanitary wastewater (design capacity is 7 MGD)
RLP 2	Outfall 002	Treated sanitary wastewater (only used during rare extreme rainfall events when the discharge flow is over 22 MGD)
RLP 3	Outfall 101	Treated sanitary wastewater (only used during wet weather events; design capacity is 30 MGD)

Relationships:

TEMPO ID	Designation	Relationship	TEMPO ID	Designation
RLP 3	Outfall 101	Internal	RLP 1	Outfall 001

Group Membership

ID	Group Type	Group Members

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Permit No.: LA0042188

Agency Interest: 19267

Subject Item: RLP0000000001: Outfall 001

Treated sanitary wastewater (design capacity is 7 MGD)

Such discharges shall be limited and monitored by the permittee as specified below:

Parameter	Discharge Limitations							Monitoring Requirements		
	Quantity / Loading Average	Quantity / Loading Maximum	Quantity / Loading Units	Quality / Conc. Minimum	Quality / Conc. Average	Quality / Conc. Maximum	Quality / Conc. Units	Frequency	Sample Type	Which Months
BOD, 5-day (20 degrees C) 00310 1	1751 MO AVG	******	lb/day	******	30 MO AVG	45 WKLY AVG	mg/l	5/week	12-hr composite	All Year
Fecal coliform, general 74055 1	******	******	******	******	200 MO AVG	400 WKLY AVG	colonies/100 ml	5/week	grab sampling	All Year
Flow, in conduit or throu gh treatment plant 50050 1	Report MO AVG	Report WKLY AVG	million gallons/day	******	******	******	******	continuously	Recorder	All Year

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Permit No.: LA0042188

Agency Interest: 19267

Subject Item: RLP0000000001: Outfall 001

Treated sanitary wastewater (design capacity is 7 MGD)

Such discharges shall be limited and monitored by the permittee as specified below:

Parameter	Discharge Limitations							Monitoring Requirements		
	Quantity / Loading Average	Quantity / Loading Maximum	Quantity / Loading Units	Quality / Conc. Minimum	Quality / Conc. Average	Quality / Conc. Maximum	Quality / Conc. Units	Frequency	Sample Type	Which Months
pH *00400* *1*	******	******	******	6.0 INST MIN	******	9.0 INST MAX	s.u.	5/week	grab sampling	All Year
TSS (Total Suspended Solids) *00530* *1*	1751 MO AVG	******	lb/day	******	30 MO AVG	45 WKLY AVG	mg/l	5/week	12-hr composite	All Year
Biomonitoring, Coefficient of Variation, 48-Hour Acute, Daphnia pulex *TQM3D* *1*	******	******	******	******	******	Report MAXIMUM	percent	quarterly	24-hr composite	All Year

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Permit No.: LA0042188

Agency Interest: 19267

Subject Item: RLP0000000001: Outfall 001

Treated sanitary wastewater (design capacity is 7 MGD)

Such discharges shall be limited and monitored by the permittee as specified below:

Parameter	Discharge Limitations							Monitoring Requirements		
	Quantity / Loading Average	Quantity / Loading Maximum	Quantity / Loading Units	Quality / Conc. Minimum	Quality / Conc. Average	Quality / Conc. Maximum	Quality / Conc. Units	Frequency	Sample Type	Which Months
Biomonitoring, Coefficient of Variation, 48-Hour Acute, Pimephales promelas TQM6C 1	******	******	******	******	******	Report MAXIMUM	percent	quarterly	24-hr composite	All Year
Biomonitoring, Low Flow Pass/Fail Static Renewal, 48-Hour Acute, Daphnia pulex TEM3D 1	******	******	******	Report 48HR MIN	Report MO AV MN	******	pass =0, fail = 1	quarterly	24-hr composite	All Year
Biomonitoring, Low Flow Pass/Fail Static Renewal, 48-Hour Acute, Pimephales promelas TEM6C 1	******	******	******	Report 48HR MIN	Report MO AV MN	******	pass =0, fail = 1	quarterly	24-hr composite	All Year

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Permit No.: LA0042188

Agency Interest: 19267

Subject Item: RLP0000000001: Outfall 001

Treated sanitary wastewater (design capacity is 7 MGD)

Such discharges shall be limited and monitored by the permittee as specified below:

Parameter	Discharge Limitations							Monitoring Requirements		
	Quantity / Loading Average	Quantity / Loading Maximum	Quantity / Loading Units	Quality / Conc. Minimum	Quality / Conc. Average	Quality / Conc. Maximum	Quality / Conc. Units	Frequency	Sample Type	Which Months
Biomonitoring, NOEC Lethality Static Renewal, 48-Hour Acute, Daphnia pulex TOM3D 1	******	******	******	Report 48HR MIN	Report MO AV MN	******	percent	quarterly	24-hr composite	All Year
Biomonitoring, NOEC Lethality Static Renewal, 48-Hour Acute, Pimephales promelas TOM6C 1	******	******	******	Report 48HR MIN	Report MO AV MN	******	percent	quarterly	24-hr composite	All Year
Biomonitoring, Whole Effluent Toxicity, Retest #1, Lethal 22415 1	******	******	******	Report 48HR MIN	Report MO AV MN	******	pass =0, fail = 1	quarterly	24-hr composite	All Year

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Permit No.: **LA0042188**

Agency Interest: **19267**

Subject Item: **RLP0000000001: Outfall 001**

Treated sanitary wastewater (design capacity is 7 MGD)

Such discharges shall be limited and monitored by the permittee as specified below:

Parameter	Discharge Limitations							Monitoring Requirements		
	Quantity / Loading Average	Quantity / Loading Maximum	Quantity / Loading Units	Quality / Conc. Minimum	Quality / Conc. Average	Quality / Conc. Maximum	Quality / Conc. Units	Frequency	Sample Type	Which Months
Biomonitoring, Whole Effluent Toxicity, Retest #2, Lethal 22416 1	******	******	******	Report 48HR MIN	Report MO AV MN	******	pass =0, fail = 1	quarterly	24-hr composite	All Year
Biomonitoring, Whole Effluent Toxicity, Retest #3, Lethal 51443 1	******	******	******	Report 48HR MIN	Report MO AV MN	******	pass =0, fail = 1	quarterly	24-hr composite	All Year

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Permit No.: **LA0042188**

Agency Interest: **19267**

Subject Item: **RLP0000000002: Outfall 002**

Treated sanitary wastewater (only used during rare extreme rainfall events when the discharge flow is over 22 MGD)

Such discharges shall be limited and monitored by the permittee as specified below:

Parameter	Discharge Limitations							Monitoring Requirements		
	Quantity / Loading Average	Quantity / Loading Maximum	Quantity / Loading Units	Quality / Conc. Minimum	Quality / Conc. Average	Quality / Conc. Maximum	Quality / Conc. Units	Frequency	Sample Type	Which Months
BOD, 5-day (20 degrees C) 00310 1	Report MO AVG	******	lb/day	******	30 MO AVG	45 WKLY AVG	mg/l	daily	12-hr composite	All Year
Fecal coliform, general 74055 1	******	******	******	******	200 MO AVG	400 WKLY AVG	colonies/100 ml	daily	grab sampling	All Year
Flow, in conduit or through treatment plant 50050 1	Report MO AVG	Report WKLY AVG	million gallons/day	******	******	******	******	continuously	Recorder	All Year

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Permit No.: **LA0042188**

Agency Interest: **19267**

Subject Item: **RLP0000000002: Outfall 002**

Treated sanitary wastewater (only used during rare extreme rainfall events when the discharge flow is over 22 MGD)

Such discharges shall be limited and monitored by the permittee as specified below:

Parameter	Discharge Limitations							Monitoring Requirements		
	Quantity / Loading Average	Quantity / Loading Maximum	Quantity / Loading Units	Quality / Conc. Minimum	Quality / Conc. Average	Quality / Conc. Maximum	Quality / Conc. Units	Frequency	Sample Type	Which Months
pH 00400 1	******	******	******	6.0 INST MIN	******	9.0 INST MAX	s.u.	daily	grab sampling	All Year
TSS (Total Suspended Solids) 00530 1	Report MO AVG	******	lb/day	******	30 MO AVG	45 WKLY AVG	mg/l	daily	12-hr composite	All Year

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Permit No.: LA0042188

Agency Interest: 19267

Subject Item: RLP0000000003: Outfall 101

Treated sanitary wastewater (only used during wet weather events; design capacity is 30 MGD)

Such discharges shall be limited and monitored by the permittee as specified below:

Parameter	Discharge Limitations							Monitoring Requirements		
	Quantity / Loading Average	Quantity / Loading Maximum	Quantity / Loading Units	Quality / Conc. Minimum	Quality / Conc. Average	Quality / Conc. Maximum	Quality / Conc. Units	Frequency	Sample Type	Which Months
BOD, 5-day (20 degrees C) 00310 I	11259 MO AVG	******	lb/day	******	******	45 WKLY AVG	mg/l	daily	12-hr composite	All Year
BOD, 5-day (20 degrees C) 00310 G	Report MO AVG	Report WKLY AVG	lb/day	******	******	******	******	daily	12-hr composite	All Year
BOD, 5-day (20 degrees C) 00310 K	******	******	******	******	******	65 WKLY AVG	percent	daily	12-hr composite	All Year

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Permit No.: **LA0042188**

Agency Interest: **19267**

Subject Item: **RLP0000000003: Outfall 101**

Treated sanitary wastewater (only used during wet weather events; design capacity is 30 MGD)

Such discharges shall be limited and monitored by the permittee as specified below:

Parameter	Discharge Limitations							Monitoring Requirements		
	Quantity / Loading Average	Quantity / Loading Maximum	Quantity / Loading Units	Quality / Conc. Minimum	Quality / Conc. Average	Quality / Conc. Maximum	Quality / Conc. Units	Frequency	Sample Type	Which Months
Flow, in conduit or through treatment plant 50050 1	Report MO AVG	Report WKLY AVG	million gallons/day	******	******	******	******	continuously	Recorder	All Year
Flow, in conduit or through treatment plant 50050 G	******	Report WKLY AVG	million gallons/day	******	******	******	******	continuously	Recorder	All Year
TSS (Total Suspended Solids) 00530 1	11259 MO AVG	******	lb/day	******	******	45 WKLY AVG	mg/l	daily	12-hr composite	All Year

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Permit No.: **LA0042188**

Agency Interest: **19267**

Subject Item: **RLP0000000003: Outfall 101**

Treated sanitary wastewater (only used during wet weather events; design capacity is 30 MGD)

Such discharges shall be limited and monitored by the permittee as specified below:

Parameter	Discharge Limitations							Monitoring Requirements		
	Quantity / Loading Average	Quantity / Loading Maximum	Quantity / Loading Units	Quality / Conc. Minimum	Quality / Conc. Average	Quality / Conc. Maximum	Quality / Conc. Units	Frequency	Sample Type	Which Months
TSS (Total Suspended Solids) 00530 G	Report MO AVG	Report WKLY AVG	lb/day	******	******	******	******	daily	12-hr composite	All Year
TSS (Total Suspended Solids) 00530 K	******	******	******	******	******	65 WKLY AVG	percent	daily	12-hr composite	All Year

FAC0000000001 (LA0042188) Water Agency Interest:

Narrative Requirements:

SWP3:

Condition No.	Condition
T-1	SWP3: Prepare, implement, and maintain a Storm Water Pollution Prevention Plan (SWP3) within six (6) months of the effective date of the final permit for first time permit issuance. Review and update, if necessary, a Storm Water Pollution Prevention Plan (SWP3) within six (6) months of the effective date of the final permit for renewal permit issuance. The SWP3 shall apply to all stormwater discharges from the facility, either through permitted outfalls or through outfalls which are not listed in the permit or as sheetflow. [LAC 33:IX.2701.A]
T-2	SWP3: Any runoff leaving developed areas of the facility, other than through the permitted outfall(s), exceeding 50 mg/l Carbon, total organic (Storet 00680), 15 mg/l Oil and grease (Storet 03582), or having a pH (Storet 00400) less than 6.0 SU or greater than 9.0 SU shall be a violation of this permit. Any discharge in excess of these limitations, which is attributable to offsite contamination shall not be considered a violation of this permit. [LAC 33:IX.2701.A]
T-3	SWP3: Include the following conditions in the SWP3 for the facility: A) an annual inspection of the facility site to identify areas contributing to the storm water discharge from developed areas of the facility and evaluate whether measures to reduce pollutant loadings identified in the SWP3 are adequate and have been properly implemented in accordance with the terms of the permit or whether additional control measures are needed; B) a prediction of the direction, rate of flow, and total quantity of pollutants which could be discharged from the facility as a result of potential equipment failure (e.g. tank overflow or leakage), natural conditions (e.g. precipitation), or other circumstances which result in significant amounts of pollutants reaching surface waters; and C) an annual report of the inspection of the facility site which should contain, at a minimum, the date and time of inspection, the name of the inspector(s), conditions found, identification of any incidents of noncompliance, and changes to be made to the SWP3; and D) develop a site map which includes all areas where stormwater may contact potential pollutants or substances which can cause pollution. Any location where reportable quantity leaks or spills have previously occurred are to be documented in the SWP3. The SWP3 shall contain a description of the potential pollutant sources, including, the type and quantity of material present and what action has been taken to assure stormwater precipitation will not directly contact the substances and result in contaminated runoff E) sign the summary report and the following certification in accordance with LAC 33:IX.2503. Attach the summary report to the SWP3 and provide to DEQ upon request: "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualitifed personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations." F) make available to DEQ, upon request, a copy of the SWP3 and any supporting documentation. [LAC 33:IX.2701.A]

FAC0000000001 (continued):

Narrative Requirements:

SWP3:

Condition No.	Condition
T-4	SWP3: If applicable, utilize all reasonable methods to minimize any adverse impact on the drainage system including but not limited to: A) maintaining adequate roads and driveway surfaces; B) removing debris and accumulated solids from the drainage system; and C) cleaning up immediately any spill by sweeping, absorbent pads, or other appropriate methods. [LAC 33:IX.2701.A]
T-5	SWP3: If applicable, clean up and dispose of all spilled product and other spilled wastes immediately according to all applicable regulations, Spill Prevention and Control (SPC) plans or Spill Prevention Control and Countermeasures (SPCC) plans. [LAC 33:IX.2701.A]
T-6	SWP3: If applicable, use of detergents, emulsifiers, or dispersants to clean up spilled product is prohibited except where necessary to comply with state or federal safety regulations (i.e., requirement for non-slippery work surface) except where the cleanup practice does not result in a discharge and does not leave residues exposed to future storm events. In all such cases, perform initial cleanup by physical removal and minimize chemical usage. [LAC 33:IX.2701.A]
T-7	SWP3: If applicable, maintain all equipment, parts, dumpsters, trash bins, petroleum products, chemical solvents, detergents, or other material exposed to storm water in a manner which prevents contamination of storm water by pollutants. [LAC 33:IX.2701.A]
T-8	SWP3: If applicable, recycle or contain for proper disposal all waste fuel, lubricants, coolants, solvents, or other fluids used in the repair or maintenance of vehicles or equipment. Clean up spills of these materials by dry means whenever possible. [LAC 33:IX.2701.A]
T-9	SWP3: If applicable, ensure that all storage tank installations with a capacity greater than 660 gallons for an individual container, or 1,320 gallons for two or more containers in aggregate within a common storage area, are constructed so that a secondary means of containment is provided for the entire contents of the largest tank plus sufficient freeboard to allow for precipitation. Diked areas should be sufficiently impervious to contain spills. [LAC 33:IX.903.B]
T-10	SWP3: If applicable, maintain all diked areas surrounding storage tanks or storm water collection basins free of residual oil or other contaminants so as to prevent the accidental discharge of these materials in the event of flooding, dike failure, or improper draining of the diked area. [LAC 33:IX.2701.A]
T-11	SWP3: If applicable, equip all drains from diked areas with valves kept in the closed condition except during periods of supervised discharge. [LAC 33:IX.2701.A]
T-12	SWP3: If applicable, inspect and maintain all check valves, tanks, drains, or other potential sources of pollutant releases on a regular basis to assure their proper operation and to prevent the discharge of pollutants. [LAC 33:IX.2701.A]
T-13	SWP3: If applicable, assure compliance with all applicable regulations promulgated under the Louisiana Solid Waste and Resource Recovery Law and the Hazardous Waste Management Law (La. R.S. 30:2151, etc.). Reference management practices required under above regulations in the SWP3. [LAC 33:IX.2701.A]

FAC0000000001 (continued):

Narrative Requirements:

SWP3:

Condition No.	Condition
T-14	SWP3: If applicable, amend the SWP3 whenever there is a change in the facility or change in the operation of the facility which materially increases the potential for the ancillary activities to result in a discharge of significant amounts of pollutants. [LAC 33:IX.2701.A]
T-15	SWP3: If applicable, if the SWP3 proves to be ineffective in achieving the general objectives of preventing the release of significant amounts of pollutants to water of the state, then the specific objectives and requirements of the SWP3 shall be subject to modification to incorporate revised SWP3 requirements. [LAC 33:IX.2701.A]

Condition No.	Condition
T-16	FACILITY SPECIFIC SWP3 CONDITIONS: A. SITE MAP. The locations of the following areas, where such areas are exposed to precipitation, shall also be included on the site map: grit, screenings and other solids handling, storage or disposal areas; sludge drying beds; dried sludge piles; compost piles; septage and/or hauled waste receiving station; and storage areas for process chemicals, petroleum products, solvents, fertilizers, herbicides and pesticides. B. EMPLOYEE TRAINING. At a minimum, must address the following areas when applicable to a facility: petroleum product management; process chemical management; spill prevention and controls; fueling procedures; general good housekeeping practices; proper procedures for using fertilizer, herbicides and pesticides. C. POTENTIAL POLLUTANT SOURCES. The summary of potential pollutant sources must also list the activities and pollutants from the following areas: grit, screenings and other solids handling, storage or disposal areas; sludge drying beds; dried sludge piles; compost piles; septage and/or hauled waste receiving station; and access roads/rail lines. D. DESCRIPTION OF BMPs TO BE USED. In addition to the other BMPs considered, the facility must consider routing storm water into treatment works, or covering exposed materials from the following exposed areas: grit, screenings and other solids handling, storage or disposal areas; sludge drying beds; dried sludge piles; compost piles; septage and/or hauled waste receiving station. [LAC 33:IX.2701.A]

FAC0000000001 (continued):

Narrative Requirements:

Condition No.	Condition
T-17	FACILITY SPECIFIC SWP3 CONDITIONS (continued): E. INSPECTIONS. The following areas must be included in all monthly inspections: access roads/rail lines; grit, screenings and other solids handling, storage or disposal areas; sludge drying beds, dried sludge piles; compost piles; septage and/or hauled waste receiving station areas. F. WASTEWATER AND WASHWATER REQUIREMENTS. If washwaters are handled in another manner other than the treatment works, the disposal method must be described and all pertinent documentation must be attached to the plan. [LAC 33:IX.2701.A]
T-18	Please note that each parameter in the Effluent Limitations and Monitoring Requirements Section (Pages 1-10) is followed by a number or letter. The number and letters correspond to the following: 1 = Effluent gross value G = Sew/influent gross value K = Percent removal. [LAC 33:IX.2701.A]
T-19	Report violations of daily maximum limitations for the pollutants listed in Other Conditions orally to the Office of Environmental Compliance within 24 hours from the time you became aware of the violation followed by a written report in five days, under the provisions of Standard Conditions Section D.6.e. (3) of this permit. [LAC 33:IX.2707.G]
T-20	Achieve compliance with the effluent limitations and monitoring requirements specified for discharges in accordance with the following schedule: Effective Date of the permit. [LAC 33:IX.2701]
T-21	Obtain prior approval from the Office of Environmental Services for any new proposed discharges at the site. [LAC 33:IX.2701]
T-22	Record all monitoring results per Standard Conditions Section C.4. [LAC 33:IX.2701.J.2]

RLP0000000001 (Outfall 001) Treated sanitary wastewater (design capacity is 7 MGD):

Submittal/Action Requirements:

Condition No.	Condition
S-1	Submit Quarterly Discharge Monitoring Report (DMR): Due quarterly, by the 15th of January, April, July, and October. Hand deliver, postmark, or electronically submit in accordance with LAC 33:I.2101.A & B no later than 1) April 15th, for monitoring in the months of January, February, and March; 2) July 15th, for monitoring in the months of April, May, and June; 3) October 15th, for monitoring in the months of July, August and September; and 4) January 15th, for monitoring in the months of October, November, and December. The submittal of quarterly discharge monitoring reports is for biomonitoring only. [LAC 33:IX.2701.L.4]
S-2	Submit Monthly Discharge Monitoring Report (DMR): Due monthly, by the 15th of the month. Hand deliver, postmark, or electronically submit in accordance with LAC 33:I.2101.A & B, no later than the 15th day of the month following each reporting period. [LAC 33:IX.2701.L.4]

Narrative Requirements:

Condition No.	Condition
T-1	Report any biomonitoring test which results in an NOEC value less than the critical dilution for lethal parameters on a Discharge Monitoring Report (DMR) and submit by the 15th of the month following the Monitoring Period in which the test failure occurred. [LAC 33:IX.1121]
T-2	Biomonitoring, Low Flow Pass/Fail Static Renewal, 48-Hour Acute, Daphnia pulex and Biomonitoring, NOEC Lethality Static Renewal, 48-Hour Acute, Daphnia pulex: If applicable (see biomonitoring recommendation), a request may be made for a testing frequency reduction upon the successful completion of the first four consecutive quarters of testing for the more sensitive species (usually the Daphnia pulex), with no lethal effects demonstrated at or below the critical dilution. If granted, the monitoring frequency may be reduced to not less than twice per year for the more sensitive species (usually the Daphnia pulex). If any test fails the survival endpoint at any time during the term of this permit, 3 monthly retests are required and increase the monitoring frequency for the more sensitive species (usually the Daphnia pulex) to once per quarter until the permit is reissued. [LAC 33:IX.1121]

RLP0000000001 (continued):

Narrative Requirements:

Condition No.	Condition
T-3	Biomonitoring, Low Flow Pass/Fail Static Renewal, 48-Hour Acute, Pimephales promelas and Biomonitoring, NOEC Lethality Static Renewal, 48-Hour Acute, Pimephales promelas: If applicable (see biomonitoring recommendation), a request may be made for a testing frequency reduction upon the successful completion of the first four consecutive quarters of testing for the less sensitive species (usually the Pimephales promelas), with no lethal effects demonstrated at or below the critical dilution. If granted, the monitoring frequency may be reduced to not less than once per year for the less sensitive species (usually the Pimephales promelas). If any test fails the survival endpoint at any time during the term of this permit, 3 monthly retests are required and increase the monitoring frequency for the less sensitive species (usually the Pimephales promelas) to once per quarter until the permit is reissued. [LAC 33:IX.1121]
T-4	Discharge Monitoring Report Prepare and submit DMRs for each outfall. Place an "X" in the No Discharge box located in the upper right corner of the DMR if there is a "No Discharge" event at any of the monitoring outfall(s) during the reporting period. If not submitting electronically, submit duplicate copies of DMRs (one set of originals and one set of copies) signed and certified as required by LAC 33:IX.2503.B, and all other reports (one set of originals) required by this permit, to the Department of Environmental Quality, Office of Environmental Compliance, Permit Compliance Unit, Post Office Box 4312, Baton Rouge, Louisiana 70821-4312. [LAC 33:IX.2701.L.4]
T-5	Monitored at the point of discharge from the final treatment unit, prior to mixing with other waters. [LAC 33:IX.2701.J.4]
T-6	There shall be no discharge of floating or settleable solids or visible foam in other than trace amounts, nor of free oil or other oily materials, nor of toxic materials in quantities such as to cause toxicity to aquatic organisms. [LAC 33:IX.1113.B]
T-7	The permittee shall analyze the final effluent for the presence of toxic substances. (See OTHER CONDITIONS, Section J). [LAC 33:IX.2701.A]
T-8	When Internal Outfall 101 is being utilized, the measurement frequency for External Outfall 001 shall be increased to daily. [LAC 33:IX.2701.A]

RLP0000000002 (Outfall 002) Treated sanitary wastewater (only used during rare extreme rainfall events when the discharge flow is over 22 MGD):

Submittal/Action Requirements:

Condition No.	Condition
S-1	Submit Monthly Discharge Monitoring Report (DMR): Due monthly, by the 15th of the month. Hand deliver, postmark, or electronically submit in accordance with LAC 33:I.2101.A & B, no later than the 15th day of the month following each reporting period. [LAC 33:IX.2701.L.4]

Narrative Requirements:

Condition No.	Condition
T-1	Discharge Monitoring Report Prepare and submit DMRs for each outfall. Place an "X" in the No Discharge box located in the upper right corner of the DMR if there is a "No Discharge" event at any of the monitoring outfall(s) during the reporting period. If not submitting electronically, submit duplicate copies of DMRs (one set of originals and one set of copies) signed and certified as required by LAC 33:IX.2503.B, and all other reports (one set of originals) required by this permit, to the Department of Environmental Quality, Office of Environmental Compliance, Permit Compliance Unit, Post Office Box 4312, Baton Rouge, Louisiana 70821-4312. [LAC 33:IX.2701.L.4]
T-2	Monitored at the point of discharge from the high rate clarifier, prior to discharge to Twelve Mile Bayou. [LAC 33:IX.2701.J.4]
T-3	There shall be no discharge of floating or settleable solids or visible foam in other than trace amounts, nor of free oil or other oily materials, nor of toxic materials in quantities such as to cause toxicity to aquatic organisms. [LAC 33:IX.1113.B]
T-4	Discharge from Emergency Outfall 002 can ONLY occur during extreme rainfall events where the discharge from External Outfall 001 would exceed 22 MGD. [LAC 33:IX.2701.A]

RLP0000000003 (Outfall 101) Treated sanitary wastewater (only used during wet weather events; design capacity is 30 MGD):

Submittal/Action Requirements:

Condition No.	Condition
S-1	Submit Monthly Discharge Monitoring Report (DMR): Due monthly, by the 15th of the month. Hand deliver, postmark, or electronically submit in accordance with LAC 33:IX.2101.A & B, no later than the 15th day of the month following each reporting period. [LAC 33:IX.2701.L.4]

Narrative Requirements:

Condition No.	Condition
T-1	Discharge Monitoring Report Prepare and submit DMRs for each outfall. Place an "X" in the No Discharge box located in the upper right corner of the DMR if there is a "No Discharge" event at any of the monitoring outfall(s) during the reporting period. If not submitting electronically, submit duplicate copies of DMRs (one set of originals and one set of copies) signed and certified as required by LAC 33:IX.2503.B, and all other reports (one set of originals) required by this permit, to the Department of Environmental Quality, Office of Environmental Compliance, Permit Compliance Unit, Post Office Box 4312, Baton Rouge, Louisiana 70821-4312. [LAC 33:IX.2701.L.4]
T-2	Monitored at the point of discharge at the effluent box of the high rate clarifier, prior to mixing with other waters. [LAC 33:IX.2701.J.4]
T-3	There shall be no discharge of floating or settleable solids or visible foam in other than trace amounts, nor of free oil or other oily materials, nor of toxic materials in quantities such as to cause toxicity to aquatic organisms. [LAC 33:IX.1113.B]
T-4	Whenever instantaneous flows to the facility headworks equals or exceeds the peak biological one-day treatment capacity of 14 MGD, the permittee is authorized to discharge from Internal Outfall 101 directly to the facility's disinfection units. Such discharges shall be limited and monitored by the permittee as specified in the Effluent Limitations and Monitoring Requirements (pages 8 - 10 of 10). [LAC 33:IX.2701.A]
T-5	The peak flow treatment system can only be used during wet weather conditions. [LAC 33:IX.2701.A]

RLP0000000003 (continued):

Narrative Requirements:

Condition No.	Condition
T-6	Discharge Monitoring Reports (DMRs) must contain total daily flow and percentage of the flow directed to the peak flow wet weather treatment system, year-to-date count of the number of times and length of times the system has been used, amount of rainfall on the day of use, and a statement indicating if all treatment units were in use and fully functional during the time of use of the peak flow wet weather system. This report is to be included in the summary section of the DMRs submitted for Internal Outfall 101. [LAC 33:IX.2701.A]

OTHER CONDITIONS

In addition to the standard conditions required in all permits and listed in STANDARD CONDITIONS FOR LPDES PERMITS, the Office has established the following additional conditions in accordance with the Louisiana Water Quality Regulations.

A. This permit does not in any way authorize the permittee to discharge a pollutant not listed or quantified in the application or limited or monitored for in the permit.

B. Authorization to discharge pursuant to the conditions of this permit does not relieve the permittee of any liability for damages to state waters or private property. For discharges to private land, this permit does not relieve the permittee from obtaining proper approval from the landowner for appropriate easements and rights of way.

C. For definitions of monitoring and sampling terminology see STANDARD CONDITIONS FOR LPDES PERMITS, Section F.

D. PERMIT REOPENER CLAUSE

This permit may be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitations issued or approved under sections 301(b)(2)(C) and (D); 304(b)(2); and 307(a)(2) of the Clean Water Act or more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional water quality studies and/or TMDLs, if the effluent standard, limitations, water quality studies or TMDLs so issued or approved:

1. Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or

2. Controls any pollutant not limited in the permit; or

3. Require reassessment due to change in 303(d) status of waterbody; or

4. Incorporates the results of any total maximum daily load allocation, which may be approved for the receiving water body.

The Louisiana Department of Environmental Quality (LDEQ) reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDLs for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as necessary to achieve compliance with water quality standards. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

E. 24-HOUR ORAL REPORATING: DAILY MAXIMUM LIMITATION VIOLATIONS

Pollutants: None

F. As an exception to STANDARD CONDITIONS FOR LPDES PERMITS, Section D.6.e.(1), the permittee shall report all overflows in the collection system with the Discharge Monitoring Report submittal. These reports shall be summarized and reported in tabular format. The summaries shall include: the date, time, duration, location, estimated volume, and cause of the overflow; observed environmental impacts from the overflow; actions taken to address the overflow; and the ultimate discharge location if not contained (e.g., storm sewer system, ditch, tributary). All other overflows and overflows which endanger human health or the environment must be reported in the manner described in STANDARD CONDITIONS FOR LPDES PERMITS, Section D.6 of the permit.

OTHER CONDITIONS (continued)

G. MUNICIPAL WATER POLLUTION PREVENTION

Pollution Prevention Requirements

1. The permittee shall institute or continue programs directed towards pollution prevention. The permittee shall institute or continue programs to improve the operating efficiency and extend the useful life of the facility. The permittee will complete an annual Environmental Audit Report **each year** for the life of this permit according to the schedule below. A copy of the Environmental Audit Form has been attached to this permit. Please make additional copies to be utilized for each year of this permit. Additional copies can be obtained upon request.

   The audit evaluation period is as follows:

Audit Period Begins	Audit Period Ends	Audit Report Completion Date
Effective Date of Permit	12 Months from Audit Period Beginning Date	3 Months from Audit Period Ending Date

   These reports shall discuss the following items:

   a. The influent loading, flow, and design capacity of the facility;

   b. The effluent quality and plant performance;

   c. The age of the wastewater treatment facility;

   d. Bypasses and overflows of the tributary sewerage system and treatment works;

   e. The ultimate disposition of the sewage sludge;

   f. Landfilling of sewage sludge and potential alternatives (if applicable);

   g. New developments at the facility;

   h. Operator certification and training;

   i. The financial status of the facility; and

   j. subjective evaluation of conditions at the facility.

2. A resolution from the permittee's governing body shall be obtained as part of the Environmental Audit Report. This resolution shall include, at a minimum, the following:

   a. An acknowledgement that the governing body has reviewed the Environmental Audit Report;

   b. A description of actions that the permittee will take to maintain compliance with the permit conditions, and if necessary, include a schedule outlining major projects to be accomplished.

3. The Environmental Audit Report and the governing body's resolution must be signed by a duly authorized representative of the permittee and shall be maintained with the permit and permit

OTHER CONDITIONS (continued)

related records (i.e. lab data, DMRs), and made available upon request by duly authorized regional inspectors and/or DEQ Headquarters representatives.

H. CONTRIBUTING INDUSTRIES AND PRETREATMENT REQUIREMENTS

1. The permittee shall operate an industrial pretreatment program in accordance with Section 402(b)(8) of the Clean Water Act, the General Pretreatment Regulations (LAC 33:IX.Subpart 2.Chapter 61) and the approved POTW pretreatment program submitted by the permittee. The pretreatment program was approved on January 11, 1985 and is tracked under the City of Shreveport – Lucas WWTP LPDES Permit, LA0041394. Modifications to the City of Shreveport's pretreatment program occurred on December 1, 1994, to include incorporation of Technically Based Local Limits (TBLLs) and an Emergency Response Plan. LDEQ approved a non-substantial modification to the Pretreatment Program on July 3, 2008. The POTW pretreatment program is hereby incorporated by reference and shall be implemented in a manner consistent with the following requirements.

   a. Industrial user information shall be updated at a frequency adequate to ensure that all IUs are properly characterized at all times;

   b. The frequency and nature of industrial user compliance monitoring activities by the permittee shall be commensurate with the character, consistency and volume of waste. The permittee must inspect and sample the effluent from each Significant Industrial User in accordance with LAC 33:IX.6115.F.2.e. This is in addition to any industrial self-monitoring activities;

   c. The permittee shall enforce and obtain remedies for noncompliance by any industrial users with applicable Pretreatment Standards and Requirements;

   d. The permittee shall control through permit, order, or similar means, the contribution to the POTW by each Industrial User to ensure compliance with applicable Pretreatment Standards and Requirements. In the case of Industrial Users identified as significant under LAC 33:IX.6105, this control shall be achieved through individual or general control mechanisms, in accordance with LAC 33:IX.6115.F.1.c. Both individual and general control mechanisms must be enforceable and contain, at a minimum, the following conditions:

      (1) Statement of duration (in no case more than five years);
      (2) Statement of non-transferability without, at a minimum, prior notification to the POTW and provision of a copy of the existing control mechanism to the new owner or operator;
      (3) Effluent limits, including Best Management Practices, based on applicable general Pretreatment Standards, categorical Pretreatment Standards, local limits, and State and local law;
      (4) Self-monitoring, sampling, reporting, notification and recordkeeping requirements, including an identification of the pollutants to be monitored (If applicable, include the process for seeking a waiver for a pollutant neither present nor expected to be present in the Discharge in accordance with LAC 33:IX.6123.E.2. Any grant of the monitoring waiver by the control authority must be included as a condition in the user's control mechanism in accordance with LAC 33:IX.6123E.2.d.), sampling location, sampling frequency, and sample type, based on the applicable general Pretreatment Standards in LAC 33:IX, Chapter 61, categorical Pretreatment Standards, local limits, and State and local law;
      (5) Statement of applicable civil and criminal penalties for violation of Pretreatment

OTHER CONDITIONS (continued)

Standards and Requirements, and any applicable compliance schedule. Such schedules may not extend the compliance date beyond federal deadlines; and

(6) Requirements to control slug discharges, if determined by the POTW to be necessary.

e. The permittee shall evaluate whether each Significant Industrial User needs a plan or other action to control slug discharges, in accordance with LAC 33:IX.6115.F.2.f.;

f. The permittee shall provide adequate staff, equipment, and support capabilities to carry out all elements of the pretreatment program; and,

g. The approved program shall not be modified by the permittee without the prior approval of the Louisiana Department of Environmental Quality.

2. The permittee shall establish and enforce specific limits to implement the provisions of LAC 33:IX.6109.A and B, as required by LAC 33:IX.6109.C. POTWs may develop Best Management Practices (BMPs) to implement paragraphs 6109.C.1 and C.2. Such BMPs shall be considered local limits and Pretreatment Standards. Each POTW with an approved pretreatment program shall continue to develop these limits as necessary and effectively enforce such limits.

The permittee shall, within sixty (60) days of the effective date of this permit, (1) submit a **WRITTEN CERTIFICATION** that a technical evaluation has demonstrated that the existing technically based local limits (TBLL) are based on current state water quality standards and are adequate to prevent pass through of pollutants, inhibition of or interference with the treatment facility, worker health and safety problems, and sludge contamination, **OR** (2) submit a **WRITTEN NOTIFICATION** that a technical evaluation revising the current TBLL and a draft sewer use ordinance which incorporates such revisions will be submitted within 12 months of the effective date of this permit.

Upon approval by the Louisiana Department of Environmental Quality, Office of Environmental Services, all specific prohibitions or limits developed under this requirement are deemed to be conditions of this permit. The specific prohibitions set out in LAC 33:IX.6109.B shall be enforced by the permittee unless modified under this provision.

3. The permittee shall analyze the treatment facility influent and effluent for the presence of the toxic pollutants listed in LAC 33:IX.7107.Appendix D (LPDES Application Testing Requirements) Table II at least [FREQ1] and the toxic pollutants in Table III at least [FREQ2]. If, based upon information available to the permittee, there is reason to suspect the presence of any toxic or hazardous pollutant listed in Table V, or any other pollutant, known or suspected to adversely affect treatment plant operation, receiving water quality, or solids disposal procedures, analysis for those pollutants shall be performed at least [FREQ3] on both the influent and the effluent.

The influent and effluent samples collected shall be composite samples consisting of at least 12 aliquots collected at approximately equal intervals over a representative 24 hour period and composited according to flow. Sampling and analytical procedures shall be in accordance with guidelines established in 40 CFR 136. The effluent samples shall be analyzed to a level at least as low as required in (6) below. Where composite samples are inappropriate, due to sampling, holding time, or analytical constraints, at least 4 grab samples, taken at equal intervals over a representative 24 hour period, shall be taken.

4. The permittee shall prepare annually a list of Industrial Users, which during the preceding twelve months were in significant noncompliance with applicable Pretreatment Requirements.

OTHER CONDITIONS (continued)

For the purposes of this Part, significant noncompliance shall be determined based upon the more stringent of either criteria established at LAC 33:IX.6115.F.2.h or criteria established in the approved POTW pretreatment program. This list is to be published annually in a newspaper of general circulation that provides meaningful public notice within the jurisdiction(s) served by the POTW during the month of January.

In addition, during the month of January an updated pretreatment annual report shall be submitted to the LDEQ, Office of Environmental Compliance – Permit Compliance Unit containing the following information. The report shall be submitted under the primary permit for which this pretreatment program's compliance information is tracked by LDEQ.

a. An updated list of all significant industrial users and identify (if applicable) any Industrial Users that the Control Authority has chosen to classify as Non-Significant Categorical Industrial Users (NSCIUs) (defined in LAC 33:IX.6105.*Significant Industrial User*.b) and/or Middle Tier CIUs (defined in LAC 33:IX.6123.E.3.a-c).

   This list must also identify:

   (1) Industrial Users subject to categorical Pretreatment Standards that are determined by the Control Authority to be eligible and approved for reduced monitoring and reporting requirements under LAC 33:IX.6123.E.2 and 3;

   (2) Industrial Users subject to the following categorical Pretreatment Standards: Organic Chemicals, Plastics, and Synthetic Fibers (OCPSF) (40 CFR Part 414), Petroleum Refining (40 CFR Part 419), and Pesticide Chemicals (40 CFR Part 455) for which the Control Authority has chosen to use concentration-based standards (as allowed in LAC 33:IX.6111.C.6) in lieu of categorical flow-based mass standards;

   (3) Categorical Industrial Users subject to concentration-based standards for which the Control Authority has chosen to convert the concentration-based standards to equivalent mass limits, as allowed at LAC 33:IX.6111.C.5;

   (4) General Control Mechanisms used for similar groups of SIUs along with the substantially similar types of operations and the types of wastes that are the same, for each separate General Control Mechanism, as allowed at LAC 33:IX.6115.F.1.c; and

   (5) Best Management Practices or Pollution Prevention alternatives required by a categorical Pretreatment Standard or as a local limit requirement that are implemented and documentation to demonstrate compliance, as required at LAC 33:IX.6123.B, E, and H.

b. For each industrial user listed the following information shall be included:

   (1) Standard Industrial Classification (SIC) or NAISC code and categorical determination;

   (2) Control document status. Whether the user has an effective control document, and the date such document was last issued, reissued, or modified, (indicate which industrial users were added to the system (or newly identified) within the previous 12 months);

   (3) A summary of all monitoring activities performed within the previous 12 months.

OTHER CONDITIONS (continued)

The following information shall be reported:

(a) total number of inspections performed;
(b) total number of sampling visits made;

(4) Status of compliance with both effluent limitations and reporting requirements. Compliance status shall be defined as follows:

(a) Compliant (C) - no violations during the previous 12 month period;
(b) Non-compliant (NC) - one or more violations during the previous 12 months but does not meet the criteria for significantly noncompliant industrial users;
(c) Significant Noncompliance (SNC) - in accordance with requirements described in 4. above; and

(5) For significantly noncompliant industrial users, indicate the nature of the violations, the type and number of actions taken (notice of violation, administrative order, criminal or civil suit, fines or penalties collected, etc.) and current compliance status. If ANY industrial user was on a schedule to attain compliance with effluent limits, indicate the date the schedule was issued and the date compliance is to be attained.

c. A list of all significant industrial users whose authorization to discharge was terminated or revoked during the preceding 12 month period and the reason for termination.

d. A report on any interference, pass through, upset or POTW permit violations known or suspected to be caused by industrial contributors and actions taken by the permittee in response.

e. The results of all influent and effluent analyses performed pursuant to 3. above.

f. A copy of the newspaper publication of the significantly noncompliant industrial users giving the name of the newspaper and the date published, and

g. The information requested may be submitted in tabular form as per the example tables provided for your convenience.

h. The monthly average water quality based effluent concentration necessary to meet the state water quality standards as developed in the approved technically based local limits.

5. Written notice of the following shall be provided to the LDEQ, Office of Environmental Services, Water Permits Division. The written notice shall be submitted under the primary permit for which this pretreatment program's compliance information is tracked by LDEQ.

a. Any new introduction of pollutants into the treatment works from an indirect discharger which would be subject to Sections 301 and 306 of the Act if it were directly discharging those pollutants; and

b. Any substantial change in the volume or character of pollutants being introduced into the treatment works by a source introducing pollutants into the treatment works at the time of issuance of the permit.

Adequate notice shall include information on (i) the quality and quantity of effluent to be

OTHER CONDITIONS (continued)

introduced into the treatment works, and (ii) any anticipated impact of the change on the quality or quantity of effluent to be discharged from the POTW.

6. All effluent monitoring conducted in accordance with 3. above shall meet the Minimum Quantification Levels (MQL) shown in the table below:

OTHER CONDITIONS (continued)

MINIMUM QUANTIFICATION LEVELS (MQLs)

METALS AND CYANIDE		VOLATILE COMPOUNDS		VOLATILE COMPOUNDS	
Pollutant	Required MQL ug/L	Pollutant	Required MQL ug/L	Pollutant	Required MQL ug/L
Aluminum	2.5	Benzene	10	1,1,2-Trichloroethane	10
Antimony (Total)	60	Bromoform	10	Trichloroethylene	10
Arsenic (Total)	5	Bromodichloromethane	10	Vinyl Chloride	10
Beryllium (Total)	0.5	Carbon Tetrachloride	2		
Cadmium (Total)	1	Chlorobenzene	10	ACID COMPOUNDS	
Chromium (Total)	10	Chlorodibromomethane	10	2-Chlorophenol	10
Chromium (3+)	10	Chloroethane	50	2,4-Dichlorophenol	10
Chromium (6+)	10	2-Chloroethylvinylether	10	2,4-Dimethylphenol	10
Copper (Total)	3	Chloroform	10	4,6-Dinitro-o-Cresol [2 methyl 4,6-dinitrophenol	50
Lead (Total)	2	Dichlorobromomethane	10	2,4-Dinitrophenol	50
Mercury (Total)	0.0005/0.005	1,1-Dichloroethane	10	2-Nitrophenol	20
Molybdenum (Total)	30	1,2-Dichloroethane	10	4-Nitrophenol	50
Nickel (Total)[1] [Freshwater]	5	1,1-Dichloroethylene	10	p-Chloro-m-Cresol [4 chloro-3-methylphenol]	10
Nickel (Total)[2] [Marine]	5	1,2-Dichloropropane	10	Pentachlorophenol	5
Selenium (Total)	5	1,3-Dichloropropylene	10	Phenol	10
Silver (Total)	0.5	Ethylbenzene	10	2,4,6-Trichlorophenol	10
Thallium (Total)	0.5	Methyl Bromide [Bromomethane]	50	BASE/NEUTRAL COMPOUNDS	
Zinc (Total)	20	Methyl Chloride [Chloromethane]	50	Acenaphthene	10
Cyanide (Total)	10	Methylene Chloride	20	Acenaphthylene	10
DIOXIN		1,1,2,2-Tetrachloroethane	10	Anthracene	10
2,3,7,8-Tetrachloro-dibenzo-p-dioxin (TCDD)	0.00001	Tetrachloroethylene	10	Benzidine	50
VOLATILE COMPOUNDS		Toluene	10	Benzo(a)anthracene	5
Acrolein	50	1,2-trans-Dichloroethylene	10	Benzo(a)pyrene	5
Acrylonitrile	20	1,1,1-Trichloroethane	10	3,4-Benzofluoranthene	10

OTHER CONDITIONS (continued)

BASE/NEUTRAL COMPOUNDS		BASE/NEUTRAL COMPOUNDS		PESTICIDES	
Pollutant	Required MQL ug/L	Pollutant	Required MQL ug/L	Pollutant	Required MQL ug/L
Benzo(ghi)perylene	20	1,2-Diphenylhydrazine	20	Delta-BHC	0.05
Benzo(k)fluoranthene	5	Fluoranthene	10	Chlordane	.2
Bis(2-chloroethoxy) methane	10	Fluorene	10	4,4'-DDT	0.02
Bis(2-chloroethyl) ether	10	Hexachlorobenzene	5	4,4'-DDE (p,p-DDX)	0.1
Bis(2-chloroisopropyl) ether	10	Hexachlorobutadiene	10	4,4'-DDD (p,p-TDE)	0.1
Bis(2-ethylhexyl) phthalate	10	Hexachlorocyclopentadiene	10	Dieldrin	0.02
4-Bromophenyl phenyl ether	10	Hexachloroethane	20	Alpha-endosulfan	0.01
Butylbenzyl phthalate	10	Indeno (1,2,2-cd) pyrene	5	Beta-endosulfan	0.02
2-Chloronapthalene	10	Isophorone	10	Endosulfan sulfate	0.1
4-Chlorophenyl phenyl ether	10	Naphthalene	10	Endrin	0.02
Chrysene	5	Nitrobenzene	10	Endrin aldehyde	0.1
Dibenzo (a,h) anthracene	5	N-nitrosodimethylamine	50	Heptachlor	0.01
1,2-Dichlorobenzene	10	N-nitrosodi-n-propylamine	20	Heptachlor epoxide[7] (BHC-hexachlorocyclohexane)	0.01
1,3-Dichlorobenzene	10	N-nitrosodiphenylamin	20	PCB-1242	0.2
1,4-Dichlorobenzene	10	Phenanthrene	10	PCB-1254	0.2
3,3'-Dichlorobenzidine	5	Pyrene	10	PCB-1221	0.2
Diethyl Phthalate	10	1,2,4-Trichlorobenzene	10	PCB-1232	0.2
Dimethyl Phthalate	10	PESTICIDES		PCB-1248	0.2
Di-n-Butyl Phthalate	10	Aldrin	0.01	PCB-1260	0.2
2,4-Dinitrotoluene	10	Alpha-BHC	0.05	PCB-1016	0.2
2,6-Dinitrotoluene	10	Beta-BHC	0.05	Toxaphene	0.3
Di-n-octyl Phthalate	10	Gamma-BHC (Lindane)	0.05		

OTHER CONDITIONS (continued)

MONITORING RESULTS[1] FOR THE ANNUAL PRETREATMENT REPORT
REPORTING YEAR: _____, 200__ TO _____, 200__

TREATMENT PLANT : _____ NPDES PERMIT NO.

METALS, CYANIDE and PHENOLS	MAHL, if applicable in µg/l [2]	Influent Values in µg/l Dates Sampled				Daily Average Effluent Limit[3]	Effluent Dates Sampled			
Antimony (Total)										
Arsenic (Total)										
Beryllium (Total)										
Cadmium (Total)										
Chromium (Total)										
Copper (Total)										
Lead (Total)										
Mercury (Total)										
Molybdenum (Total)										
Nickel (Total)										
Selenium (Total)										
Silver (Total)										
Thallium (Total)										
Zinc (Total										
Cyanide (Total)										
Phenols (Total)										
[4]										

[1] It is advised that the influent and effluent samples are collected considering flow detention time through each plant. Analytical MQLs should be used so that the data can also be used for Local Limits assessment and NPDES application purposes.

[2] Maximum Allowable Headworks Loading limitation in µg/l. Only complete for pollutants that have approved Technically Based Local Limits.

[3] Daily average effluent limit in the LPDES permit OR the applicable state Water Quality Standard calculated to an equivalent permit effluent limit. See Appendix B-1, Column (*19).

[4] **Record the names of any pollutants [LAC 33:IX.7107.Appendix D, Table II and/or Table V] detected and the quantity in which they were detected.**

OTHER CONDITIONS (continued)

SIGNIFICANTLY NONCOMPLIANT USERS - ENFORCEMENT ACTIONS TAKEN

Industrial User	Nature of Violation		Number of Actions Taken					PENALTIES COLLECTED	COMPLIANCE SCHEDULE			COMMENTS
	REPORTS	LIMITS	N.O.V.	A.O.	CIVIL	CRIMINAL	OTHER		DATE ISSUED	DATE DUE	CURRENT STATUS	

OTHER CONDITIONS (continued)

PRETREATMENT PROGRAM STATUS REPORT
UPDATED SIGNIFICANT INDUSTRIAL USERS LIST

INDUSTRIAL USER	SIC CODE	CATEGORICAL DETERMINATION	CONTROL DOCUMENT		NEW USER	TIMES INSPECTED	TIMES SAMPLED	COMPLIANCE STATUS				
			Y/N	LAST ACTION				REPORTS				EFFLUENT LIMITS
								BMR	90-DAY COMPLIANCE	SEMI ANNUAL	SELF MONITORING	

OTHER CONDITIONS (continued)

I. ACCEPTANCE OF HAULED SEWAGE SLUDGE

A. Receipt of Hauled Sewage Sludge

1. Definitions

a. *Domestic Septage* – liquid or solid material removed from a septic tank, holding tank or similar device, cesspool, portable toilet, Type III marine sanitation device, or similar treatment works that receives only domestic sewage. *Domestic septage* does not include liquid or solid material removed from a septic tank, holding tank or similar device, cesspool, or similar treatment works that receives either commercial wastewater or industrial wastewater, and does not include grease removed from a grease trap at a *food service facility*, as defined in LAC 33:IX.7301.B.

b. *Domestic Sewage* – waste and wastewater from humans or household operations that is discharged to or otherwise enters a treatment works.

c. *Sewage Sludge* – any solid, semi-solid, or liquid residue removed during the treatment of municipal wastewater or domestic sewage. *Sewage sludge* includes, but is not limited to, solids removed during primary, secondary, or advanced wastewater treatment, scum, domestic septage, portable toilet pumpings, Type III marine sanitation device pumpings (33 CFR Part 159), and sewage sludge products. *Sewage sludge* does not include grit or screenings, or ash generated during the incineration of sewage sludge.

d. *Treatment Works Treating Domestic Sewage* – a POTW or any other sewage sludge or wastewater treatment devices or systems, regardless of ownership (including federal facilities), used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated for the disposal of sewage sludge. This definition does not include septic tanks or similar devices.

2. Sewage Sludge must be received only at a point designated by the facility. The designated point must be at the headworks or in the collection system.

3. Treatment works treating domestic sewage that receive hauled sewage sludge may not accept greater than 3% of the facility's expected flow in hauled sewage sludge.

4. Any truck disposing of hauled sewage sludge into the facility must be properly licensed by the Louisiana Department of Environmental Quality to haul sewage sludge. The receipt of hauled sewage sludge from an unauthorized/unlicensed hauler shall constitute a violation of the permit.

5. Sanitary Landfills that accept hauled sewage sludge shall dispose of the sewage sludge in the active cells of the landfill. The acceptance of hauled sewage sludge into an on-site oxidation pond and/or treatment facility at the landfill is prohibited unless otherwise authorized by this Department. Approval by the Department may require a modification of the permit and coverage under a Sewage Sludge Use and Disposal Permit.

6. Reporting and record keeping requirements.

a. Sewage Sludge Hauler Manifest System

OTHER CONDITIONS (continued)

The permittee shall develop and implement a sewage sludge hauler manifest system. The manifest system shall be the primary mechanism by which the facility will identify the quantity and quality of wastes being discharged into the facility. The manifest system also provides a means to ensure only authorized wastes are being introduced into the facility. The manifest system shall require the waste hauler to complete an entry for each load picked up. The manifest form shall include at minimum the following information:

i. Name, address and phone number of the hauler.
ii. Hauler Vehicle license number.
iii. Driver name.
iv. LDEQ Hauler Registration Number
v. Generator Information (where the septage was picked up from) including:
   a) Address of the generator.
   b) Name of generator (business name) if not an individual residence.
   c) Date the waste was pumped.
   d) Volume pumped by the hauler.
vi. A statement to be signed by the hauler certifying:
   a) The manifest was prepared by him or under his direction or supervision;
   b) The information contained in the manifest is, to the best of his knowledge and belief, true, accurate, and complete;
   c) The introduction of sewage sludge into the facility is in accordance and in compliance with the requirements of the facility's LPDES permit;
   d) The vehicle load does not contain hazardous wastes as defined at 40 CFR Part 261; and
   e) That the hauler is aware of penalties for submititting false information.

The certification shall be followed by the Printed Name, Signature and Date of Signature of the hauler.

vii. Location of disposal of the sewage sludge at the facility (e.g. manhole, headworks, etc.).
viii. The facility shall supply blank manifest forms to each hauler.
ix. A copy of the completed, signed and dated manifest form shall be supplied to the hauler upon discharge of the wastes into the facility. Duplicate forms are permissible.

Manifests shall be maintained by the facility for a period not less than five (5) years from the date of the receipt of the sewage sludge and shall be made available upon request by duly authorized regional inspectors and/or Department Headquarters representatives. An example manifest form has been attached for your convience.

b. Reporting to the Department.

The Sewage Sludge and Biosolids Use or Disposal Reporting Form for Receivers of Sewage Sludge From Outside Sources (Form 7254) shall be submitted annually to the Department no later than February 19th of each calendar year. This information will be utilized to provide QA/QC in the annual

OTHER CONDITIONS (continued)

licensing of sewage sludge haulers. This information shall be submitted to:

Department of Environmental Quality
Office of Environmental Compliance
Permit Compliance Unit
Post Office Box 4312
Baton Rouge, Louisiana 70821-4312

J. TOXIC SUBSTANCES **(Outfall 001 only)**

The permittee shall analyze the final effluent for the presence of the following toxic substances.

1. A report containing the results of the lab analysis indicating if any toxic substances have exceeded the MQL including a brief summary of any abatement taken at the time, must be submitted to this Office within 20 days of completion of the analysis. **The first analysis shall be performed within one year following the effective date of the permit, and annually thereafter, by a 24-hour composite sample type.**

Reports must be submitted to the following address:

Department of Environmental Quality
Office of Environmental Compliance
Post Office Box 4312
Baton Rouge, Louisiana 70821-4312

TOXIC SUBSTANCES (CAS No.)	Required MQL (µg/l)
VOLATILE ORGANIC CHEMICALS	
acrolein (107-02-8)	50
acrylonitrile (107-13-1)	20
benzene (71-43-2)	10
bromodichloromethane (dichlorobromomethane) (75-27-4)	10
bromoform (tribromomethane) (75-25-2)	10
carbon tetrachloride (56-23-5)	2
chlorobenzene (108-90-7)	10
chloroform (trichloromethane)	10
chloromethane (methyl chloride) (74-87-3)	20
1,1-dichloroethane (75-34-3)	10
1,2-dichloroethane (107-06-2)	10
1,1-dichloroethylene (75-35-4)	10
dichloromethane (methylene chloride) (75-09-2)	20
cis-1,3-dichloropropene	10
trans-1,3-dichloropropene	10
ethylbenzene (100-41-4)	10
para-dichlorobenzene[2]	---
1,1,2,2-tetrachloroethane (79-34-5)	10
tetrachloroethylene (127-18-4)	10
toluene (108-88-3)	10
1,1,1-trichloroethane (71-55-6)	10

OTHER CONDITIONS (continued)

TOXIC SUBSTANCES (CAS No.)	Required MQL (µg/l)
1,1,2-trichloroethane (79-00-5)	10
trichloroethylene (79-01-6)	10
vinyl chloride (chloroethylene) (75-01-4)	10
ACID EXTRACTABLE ORGANIC CHEMICAL	
2-chlorophenol (95-57-8)	10
3-chlorophenol	10
4-chlorophenol	10
2,4-dichlorophenol (120-83-2)	10
2,3-dichlorophenol	10
2,5-dichlorophenol	10
2,6-dichlorophenol	10
3,4-dichlorophenol	10
2,4-dinitrophenol (51-28-5)	50
pentachlorophenol (87-86-5)	5
phenol (108-95-2)	10
2,4,6-trichlorophenol (88-06-2)	10
BASE/NEUTRAL EXTRACTABLE ORGANIC CHEMICALS	
anthracene (120-12-7)	10
benzidine (92-87-5)	50
bis(2-chloroethyl)ether (111-44-4)	10
bis(2-chloro-1-methylethyl)ether (39638-32-9)	10
bis(2-ethylhexyl)phthalate (117-81-7)	10
di-n-butyl phthalate (84-74-3)	10
1,3-dichlorobenzene (541-73-1)	10
1,2-dichlorobenzene (95-50-1)	10
1,4-dichlorobenzene (106-46-7)	10
3,3-dichlorobenzidine (91-94-1)	50
diethyl phthalate (84-66-2)	10
dimethyl phthalate (131-11-3)	10
2,4-dinitrotoluene (121-14-2)	10
1,2-diphenylhydrazine (122-66-7)	20
fluoranthene (206-44-0)	10
hexachlorobenzene (118-07-1)	10
hexachlorobutadiene (87-68-3)	10
hexachlorocyclopentadiene (77-47-4)	10
hexachloroethane (67-72-1)	20
isophorone (78-59-1)	10
nitrobenzene (98-95-3)	10
N-nitrosodimethylamine (62-75-9)	50
N-nitrosodiphenylamine (86-30-6)	20
PESTICIDES & PCB=S	
aldrin (309-00-2)	0.01

OTHER CONDITIONS (continued)

TOXIC SUBSTANCES (CAS No.)	Required MQL (µg/l)
PCB"s (Total)	0.2
gamma-BHC (Lindane, Hexachlorocyclohexane) (58-89-9)	0.05
chlordane (57-74-9)	0.2
4,4"DDD (TDE) (72-54-8)	0.1
4,4"DDE (72-55-9)	0.1
4,4"DDT (50-29-3)	0.1
dieldrin (60-57-1)	0.02
endosulfan I (alpha) (115-29-7)	0.01
endosulfan II (beta) (115-29-7)	0.02
endrin (72-20-8)	0.02
heptachlor (76-44-8)	0.01
methoxychlor[2]	---
2,3,7,8-tetrachlorodibenzo-p-dioxin (1764-01-6)	[3]
toxaphene (8001-35-2)	0.3
2,4-dichlorophenoxyacetic acid (2,4-D) (94-75-7)	10
2-(2,4,5-trichlorophenoxy)proprionic acid	4
METALS	
antimony (7440-36-0)	60
arsenic (7440-38-2)	5
barium[2]	---
beryllium (7440-41-7)	0.5
cadmium (7440-43-9)	1
chromium III (16065-83-1)	10
chromium VI (7440-47-3)	10
copper (7550-50-8)	3
lead (7439-92-1)	2
fluoride[2]	---
mercury (7439-97-6)	0.005
nickel (7440-02-0)	5
nitrate (as N)[2]	---
selenium (7782-49-2)	5
silver (7440-22-4)	0.5
thallium (7440-28-0)	0.5
zinc (7440-66-6)	20
MISCELLANEOUS	
total cyanide	10
total phenols	5

OTHER CONDITIONS (continued)

M. WHOLE EFFLUENT TOXICITY TESTING (48 HR ACUTE NOEC: FRESHWATER)

It is unlawful and a violation of this permit for a permittee or the designated agent, to manipulate test samples in any manner, to delay sample shipment, or to terminate or to cause to terminate a toxicity test. Once initiated, all toxicity tests must be completed unless specific authority has been granted by the Louisiana Department of Environmental Quality.

1. SCOPE AND METHODOLOGY

a. The permittee shall test the effluent for toxicity in accordance with the provisions in this section.

APPLICABLE TO OUTFALL(S) AND SPECIES: **Outfall 001 – DA[1]; PL[2]**

CRITICAL DILUTION: **24%**

EFFLUENT DILUTION SERIES: **10%, 13%, 18%, 24%, and 32%**

SAMPLE TYPE: **24-Hour Composite**

TEST SPECIES/METHODS: **40 CFR Part 136**

Daphnia pulex acute static renewal 48-hour definitive toxicity test using EPA-821-R-02-012, or the latest update thereof. A minimum of five (5) replicates with ten (10) organisms per replicate must be used in the control and in each effluent dilution of this test.

Pimephales promelas (Fathead minnow) acute static renewal 48-hour definitive toxicity test using EPA-821-R-02-012, or the latest update thereof. A minimum of five (5) replicates with ten (10) organisms per replicate must be used in the control and in each effluent dilution of this test.

b. The NOEC (No Observed Effect Concentration) is defined as the greatest effluent dilution at and below which lethality that is statistically different from the control (0% effluent) at the 95% confidence level does not occur.

c. This permit may be reopened to require whole effluent toxicity limits, chemical specific effluent limits, additional testing, and/or other appropriate actions to address toxicity.

d. Test failure is defined as a demonstration of statistically significant lethal effects to a test species at or below the effluent critical dilution.

2. PERSISTENT LETHALITY

The requirements of this subsection apply only when a toxicity test demonstrates significant lethal effects at or below the critical dilution. Significant lethal effects are herein defined as a statistically significant difference at the 95% confidence level between the survival of the appropriate test organism in a specified effluent dilution and the control (0% effluent).

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[1] DA = *Daphnia pulex*
[2] PL = *Pimephales promelas*

OTHER CONDITIONS (continued)

If any valid test demonstrates significant lethal effects to a test species at or below the critical dilution, the frequency of testing for that species is automatically increased to once per quarter for the term of the permit.

a. The permittee shall conduct a total of three (3) additional tests for any species that demonstrates statistically significant lethal toxic effects at the critical dilution or lower effluent dilutions. The additional tests shall be conducted monthly during the next three consecutive months in which a discharge occurs to determine if toxicity is persistent or occurs on a periodic basis. The purpose of this testing is to determine whether toxicity is present at a level and frequency that will provide toxic sample results to use in performing a Toxicity Reduction Evaluation (TRE). If no additional test failures occur during the retest monitoring period, the testing frequency will be once per quarter for the term of the permit or until another test failure occurs. The permittee may substitute one of the additional tests in lieu of one routine toxicity test. A full report shall be prepared for each test required by this section in accordance with procedures outlined in item 4 of this section and submitted with the period discharge monitoring report (DMR) to the permitting authority for review.

b. If any of the valid additional tests demonstrates significant lethal effects at or below the critical dilution, the permittee shall initiate Toxicity Reduction Evaluation (TRE) requirements as specified in item 6 of this section. The permittee shall notify the Department of Environmental Quality, Office of Environmental Compliance - Permit Compliance Unit in writing within 5 days of the failure of any retest, and the TRE initiation date will be the test completion date of the first failed retest. A TRE may also be required due to a demonstration of intermittent lethal effects at or below the critical dilution, or for failure to perform the required retests.

c. The provisions of item 2.a are suspended upon submittal of the **TRE Action Plan**.

3. REQUIRED TOXICITY TESTING CONDITIONS

a. Test Acceptance

The permittee shall repeat a test, including the control and all effluent dilutions, if the procedures and quality assurance requirements defined in the test methods or in this permit are not satisfied, including the following additional criteria:

i. Each toxicity test control (0% effluent) must have a survival equal to or greater than 90%.

ii. The percent coefficient of variation between replicates shall be 40% or less in the control (0% effluent) for the *Daphnia pulex* survival test and Fathead minnow survival test.

iii. The percent coefficient of variation between replicates shall be 40% or less in the critical dilution, unless significant lethal effects are exhibited for the *Daphnia pulex* survival test and Fathead minnow survival test.

Test failure may not be construed or reported as invalid due to a coefficient of variation value of greater than 40%. A repeat test shall be conducted within the required reporting period of any test determined to be invalid. Tests deemed invalid per the requirements of item 3 will not be considered failures.

OTHER CONDITIONS (continued)

b. Statistical Interpretation

For the *Daphnia pulex* survival test and the Fathead minnow survival test, the statistical analyses used to determine if there is a statistically significant difference between the control and the critical dilution shall be in accordance with the methods for determining the No Observed Effect Concentration (NOEC) as described in EPA-821-R-02-012, or the most recent update thereof.

If the conditions of Test Acceptability are met in Item 3.a above and the percent survival of the test organism is equal to or greater than 90% in the critical dilution concentration and all lower dilution concentrations, the test shall be considered to be a passing test, and the permittee shall report an NOEC of not less than the critical dilution for the DMR reporting requirements found in Item 4 below.

c. Dilution Water

i. Dilution water used in the toxicity tests will be receiving water collected as close to the point of discharge as possible but unaffected by the discharge. The permittee shall substitute synthetic dilution water of similar pH, hardness, and alkalinity to the closest downstream perennial water for;

A. toxicity tests conducted on effluent discharges to receiving water classified as intermittent streams; and

B. toxicity tests conducted on effluent discharges where no receiving water is available due to zero flow conditions.

ii. If the receiving water is unsatisfactory as a result of instream toxicity (fails to fulfill the test acceptance criteria of item 3.a), the permittee may substitute synthetic dilution water for the receiving water in all subsequent tests provided the unacceptable receiving water test met the following stipulations:

A. a synthetic dilution water control which fulfills the test acceptance requirements of item 3.a was run concurrently with the receiving water control;

B. the test indicating receiving water toxicity has been carried out to completion (i.e., 48 hours);

C. the permittee includes all test results indicating receiving water toxicity with the full report and information required by item 4 below; and

D. the synthetic dilution water shall have a pH, hardness, and alkalinity similar to that of the receiving water or closest downstream perennial water not adversely affected by the discharge, provided the magnitude of these parameters will not cause toxicity in the synthetic dilution water.

d. Samples and Composites

i. The permittee shall collect two flow-weighted 24-hour composite samples from the outfall(s) listed at item 1.a above. A 24-hour composite sample consists of a minimum of 4 effluent portions collected at equal time intervals representative of a 24-hour operating day and combined proportional to flow or a sample continuously collected proportional to flow over a 24-hour operating day.

OTHER CONDITIONS (continued)

ii. The permittee shall collect a second 24-hour composite sample for use during the 24-hour renewal of each dilution concentration for both tests. The permittee must collect the 24-hour composite samples so that the maximum holding time for any effluent sample shall not exceed 36 hours. The permittee must have initiated the toxicity test within 36 hours after the collection of the last portion of the first 24-hour composite sample. Samples shall be chilled to 0-6 degrees Centigrade during collection, shipping and/or storage.

iii. The permittee must collect the 24-hour composite samples such that the effluent samples are representative of any periodic episode of chlorination, biocide usage or other potentially toxic substance discharged on an intermittent basis.

iv. If the flow from the outfall(s) being tested ceases during the collection of effluent samples, the requirements for the minimum number of effluent samples, the minimum number of effluent portions and the sample holding time are waived during that sampling period. However, the permittee must collect an effluent composite sample volume during the period of discharge that is sufficient to complete the required toxicity tests with daily renewal of effluent. When possible, the effluent samples used for the toxicity tests shall be collected on separate days. The effluent composite sample collection duration and the static renewal protocol associated with the abbreviated sample collection must be documented in the full report required in item 4 of this section.

4. REPORTING

a. A valid test must be completed and test results must be submitted for each species during each Monitoring Period. The permittee shall prepare a full report of the results of all tests conducted pursuant to this Part in accordance with the Report Preparation Section of EPA-821-R-02-012, for every valid or invalid toxicity test initiated, whether carried to completion or not. The permittee shall retain each full report pursuant to the provisions of Part III.C of this permit. For any test which fails, is considered invalid, or which is terminated early for any reason, the full report must be submitted for agency review. **Any available information relevant to the test failure (e.g., faulty equipment, severe weather conditions) should be included in this report to assist the agency in assessing appropriate controls to prevent future toxic discharges.** The permittee shall submit the first full report to:

Department of Environmental Quality
Office of Environmental Compliance
P. O. Box 4312
Baton Rouge, Louisiana 70821-4312
Attn: Permit Compliance Unit

b. The permittee shall submit the results of each valid toxicity test on the DMR for that Monitoring Period in accordance with Part III D.4 and the DMR Monitoring Period schedule contained in Part II of this permit. Submit retest information clearly marked as such on the DMR for the Monitoring Period in which the retest occurred. Only results of valid tests are to be reported on the DMR. The permittee shall submit the Table 1 Summary Sheet with each valid test.

i. *Pimephales promelas* (Fathead minnow)

A. If the No Observed Effect Concentration (NOEC) for survival is less

OTHER CONDITIONS (continued)

than the critical dilution, enter a "1"; otherwise, enter a "0" for Parameter No. TEM6C.

B. Report the NOEC value for survival, Parameter No. TOM6C.

C. Report the highest (critical dilution or control) Coefficient of Variation, Parameter No. TQM6C.

ii. *Daphnia pulex*

A. If the NOEC for survival is less than the critical dilution, enter a "1"; otherwise, enter a "0" for Parameter No. TEM3D.

B. Report the NOEC value for survival, Parameter No. TOM3D.

C. Report the highest (critical dilution or control) Coefficient of Variation, Parameter No. TQM3D.

iii. The permittee shall report the following results for all VALID toxicity retests on the DMR for that Monitoring Period.

A. Retest #1 (STORET 22415): If the first monthly retest following failure of a routine test for either test species results in an NOEC for survival less than the critical dilution, report a "1"; otherwise, report a "0".

B. Retest #2 (STORET 22416): If the second monthly retest following failure of a routine test for either test species results in an NOEC for survival less than the critical dilution, report a "1"; otherwise, report a "0".

C. Retest #3 (STORET 51443): If the third monthly retest following failure of a routine test for either test species results in an NOEC for survival less than the critical dilution, report a "1"; otherwise, report a "0".

If, for any reason, a retest cannot be performed during the Monitoring Period in which the triggering routine test failure is experienced, the permittee shall report it on the following Monitoring Period's DMR, and the comments section of the DMRs shall be annotated to that effect. If retesting is not required during a given Monitoring Period, the permittee shall leave these DMR fields blank.

The permittee shall submit the toxicity testing information contained in Table 1 of this permit with the DMR subsequent to each and every toxicity test Monitoring Period. The DMR and the summary table should be sent to the address indicated in 4.a.

5. MONITORING FREQUENCY REDUCTION

a. Upon successfully passing the first four consecutive quarters of WET testing after permit issuance/reissuance and in the absence of subsequent lethal toxicity for one or both test species at or below the critical dilution, the permittee may apply for a testing frequency reduction. If granted, the monitoring frequency for that test species may be reduced to not less than once per year for the less sensitive species (usually the Fathead minnow) and not less than twice per year for the more sensitive test species (usually the *Daphnia pulex*).

OTHER CONDITIONS (continued)

b. CERTIFICATION - The permittee must certify in writing that no test failures have occurred and that all tests meet all test acceptability criteria in item 3.a above. In addition, the permittee must provide a list with each test performed including test initiation date, species, NOECs for lethal effects and the maximum coefficient of variation for the controls. Upon review and acceptance of the information, the agency will issue a letter of confirmation of the monitoring frequency reduction. A copy of the letter will be forwarded to the agency's Permit Compliance Unit to update the permit reporting requirements.

c. This monitoring frequency reduction applies only until the expiration date of this permit, at which time the Monitoring Frequency/Monitoring Period for both test species reverts to once per quarter until the permit is re-issued.

d. SURVIVAL FAILURES - If any test fails the survival endpoint at any time during the term of this permit, three monthly retests are required and the monitoring frequency for the affected species shall be increased to once per quarter until the permit is re-issued. Monthly retesting is not required if the permittee is performing a TRE.

6. TOXICITY REDUCTION EVALUATION (TRE)

a. Within ninety (90) days **of confirming lethality in any retest**, the permittee shall submit a **Toxicity Reduction Evaluation (TRE) Action Plan and Schedule** for conducting a TRE. The **TRE Action Plan** shall specify the approach and methodology to be used in performing the TRE. A Toxicity Reduction Evaluation is an investigation intended to determine those actions necessary to achieve compliance with water quality-based effluent requirements and/or chemical-specific limits by reducing an effluent's toxicity to an acceptable level. A TRE is defined as a step-wise process which combines toxicity testing and analyses of the physical and chemical characteristics of a toxic effluent to identify the constituents causing effluent toxicity and/or treatment methods which will reduce the effluent toxicity. The **TRE Action Plan** shall lead to the successful elimination of effluent toxicity at the critical dilution and include the following:

i. Specific Activities. The plan shall detail the specific approach the permittee intends to utilize in conducting the TRE. The approach may include toxicity characterizations, identifications and confirmation activities, source evaluation, treatability studies, or alternative approaches. When the permittee conducts Toxicity Characterization Procedures the permittee shall perform multiple characterizations and follow the procedures specified in the documents **"Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures" (EPA-600/6-91/003)** and **"Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I" (EPA-600/6-91/005)**, or alternate procedures. When the permittee conducts Toxicity Identification Evaluations and Confirmations, the permittee shall perform multiple identifications and follow the methods specified in the documents **"Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/080)** and **"Methods for Aquatic Toxicity Identification Evaluations, Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/081)**, as appropriate;

The documents referenced above may be obtained through the National Technical Information Service (NTIS) by phone at 1-800-553-6847, or by writing:

OTHER CONDITIONS (continued)

U.S. Department of Commerce
National Technical Information Service
5285 Port Royal Road
Springfield, VA 22161

ii. Sampling Plan (e.g., locations, methods, holding times, chain of custody, preservation, etc.). The effluent sample volume collected for all tests shall be adequate to perform the toxicity test, toxicity characterization, identification and confirmation procedures, and conduct chemical specific analyses when a probable toxicant has been identified;

Where the permittee has identified or suspects specific pollutant(s) and/or source(s) of effluent toxicity, the permittee shall conduct, concurrent with toxicity testing, chemical specific analyses for the identified and/or suspected pollutant(s) and/or source(s) of effluent toxicity. Where lethality was demonstrated within 24 hours of test initiation, each 24-hour composite sample shall be analyzed independently. Otherwise the permittee may substitute a composite sample, comprised of equal portions of the individual 24-hour composite samples, for the chemical specific analysis;

iii. Quality Assurance Plan (e.g., QA/QC implementation, corrective actions, etc.); and

iv. Project Organization (e.g., project staff, project manager, consulting services, etc.).

b. The permittee shall initiate the **TRE Action Plan** within thirty (30) days of plan and schedule submittal. The permittee shall assume all risks for failure to achieve the required toxicity reduction.

c. The permittee shall submit a quarterly **TRE Activities Report**, with the Discharge Monitoring Report in the months of January, April, July, and October, containing information on toxicity reduction evaluation activities including:

i. any data and/or substantiating documentation which identify the pollutant(s) and/or source(s) of effluent toxicity;

ii. any studies/evaluations and results on the treatability of the facility's effluent toxicity; and

iii. any data which identify effluent toxicity control mechanisms that will reduce effluent toxicity to the level necessary to achieve compliance with permit biomonitoring requirements and/or chemical-specific limits.

The **TRE Activities Report** shall be submitted to the following address:

Department of Environmental Quality
Office of Environmental Compliance
P.O. Box 4312
Baton Rouge, Louisiana 70821-4312
Attn: Permit Compliance Unit

d. The permittee shall submit a Final Report on Toxicity Reduction Evaluation Activities no later than twenty-eight (28) months from confirming lethality in the retests, which

OTHER CONDITIONS (continued)

provides information pertaining to the specific control mechanism selected that will, when implemented, result in the permittee achieving compliance with permit biomonitoring requirements and/or chemical-specific limits. The report will also provide a specific corrective action schedule for implementing the selected control mechanism.

A copy of the Final Report on Toxicity Reduction Evaluation Activities shall also be submitted to the above addresses.

e. Quarterly testing during the TRE is a minimum monitoring requirement. LDEQ recommends that permittees required to perform a TRE not rely on quarterly testing alone to ensure success in the TRE, and that additional screening tests be performed to capture toxic samples for identification of toxicants. At the end of the TRE, LDEQ will consider all information submitted and establish appropriate controls to prevent future toxic discharges, including WET and/or chemical-specific limits per state regulations at LAC 33:IX.2707.D.1.e.

TABLE 1
SUMMARY SHEET
***Daphnia pulex* ACUTE SURVIVAL TEST RESULTS**

PERMITTEE:_____
FACILITY SITE:_____
LPDES PERMIT NUMBER:_____
OUTFALL IDENTIFICATION:_____
OUTFALL SAMPLE IS FROM _____SINGLE _____MULTIPLE DISCHARGE
BIOMONITORING LABORATORY:_____
DILUTION WATER USED:_____RECEIVING WATER _____LAB WATER
CRITICAL DILUTION _____% DATE TEST INITIATED_____

1. **LOW-FLOW LETHALITY:**

Is the mean survival at 48 hours significantly less (p=0.05) than the control survival for the low flow or critical dilution? _____Yes _____No

DILUTION SERIES RESULTS - *Daphnia*

TIME OF READING	REP	0%					
24-HOUR							
48-HOUR							
MEAN							

2. Are the test results to be considered valid? _____Yes _____No
If _X_no (test invalid) , what reasons for invalidity?

3. Is this a retest of a previous invalid test? _____Yes _____No
Is this a retest of a previous test failure? _____Yes _____No

4. Enter percent effluent corresponding to each NOEC (No Observed Effect Concentration) for *Daphnia pulex*:

NOEC _____% EFFLUENT

$LC_{50}48$ _____% EFFLUENT

TABLE 1
SUMMARY SHEET
***Pimephales promelas* ("fathead minnow") ACUTE SURVIVAL TEST**

PERMITTEE: _____
FACILITY SITE: _____ LPDES PERMIT NUMBER: ____
_____
_____
OUTFALL IDENTIFICATION: _____
OUTFALL SAMPLE IS FROM _____ SINGLE _____ MULTIPLE DISCHARGE
BIOMONITORING LABORATORY: _____
DILUTION WATER USED: _____ RECEIVING WATER _____ LAB WATER
CRITICAL DILUTION _____ % DATE TEST INITIATED _____

1. **LOW-FLOW LETHALITY:**

Is the mean survival at 48 hours days significantly less (p=0.05) than the control survival at the low-flow or critical dilution? _____Yes _____No

DILUTION SERIES RESULTS - *Pimephales*

TIME OF READING	REP	0%					
24-HOUR							
48-HOUR							
MEAN							

3. Are the test results to be considered valid? _____Yes _____No
If _X_no (test invalid) , what reasons for invalidity?

4. Is this a retest of a previous invalid test? _____Yes _____No
Is this a retest of a previous test failure? _____Yes _____No

5. Enter percent effluent corresponding to each NOEC (No Observed Effect Concentration) for *Pimephales*:

a. NOEC _____% effluent

b. $LC_{50}48$ _____% effluent

STANDARD CONDITIONS FOR LPDES PERMITS

SECTION A. GENERAL CONDITIONS

1. Introduction
   In accordance with the provisions of LAC 33:IX.2701, et seq., this permit incorporates either expressly or by reference ALL conditions and requirements applicable to the Louisiana Pollutant Discharge Elimination System Permits (LPDES) set forth in the Louisiana Environmental Quality Act (LEQA), as amended, as well as ALL applicable regulations.

2. Duty to Comply
   The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act (CWA) and the Louisiana Environmental Quality Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

3. Penalties for Violation of Permit Conditions
   a. La. R. S. 30:2025 provides for civil penalties for violations of these regulations and the Louisiana Environmental Quality Act. La. R. S. 30:2076.2 provides for criminal penalties for violation of any provisions of the LPDES or any order or any permit condition or limitation issued under or implementing any provisions of the LPDES program. (See Section E. Penalties for Violation of Permit Conditions for additional details).

   b. Any person may be assessed an administrative penalty by the State Administrative Authority under La. R. S. 30:2025 for violating a permit condition or limitation implementing any of the requirements of the LPDES program in a permit issued under the regulations or the Louisiana Environmental Quality Act.

4. Toxic Pollutants
   a. Other effluent limitations and standards under Sections 301, 302, 303, 307, 318, and 405 of the Clean Water Act. If any applicable toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under Section 307(a) of the Clean Water Act for a toxic pollutant and that standard or prohibition is more stringent than any limitation on the pollutant in this permit, the state administrative authority shall institute proceedings under these regulations to modify or revoke and reissue the permit to conform to the toxic effluent standard or prohibition.

   b. The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the Clean Water Act within the time provided in the regulations that establish these standards or prohibitions, or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.

5. Duty to Reapply
   a. Individual Permits. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The new application shall be submitted at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the state administrative authority. (The state administrative authority shall not grant permission for applications to be submitted later than the expiration date of the existing permit.) Continuation of expiring permits shall be governed by regulations promulgated at LAC 33:IX.2321 and any subsequent amendments.

b. General Permits. General permits expire five years after the effective date. The 180-day reapplication period as defined above is not applicable to general permit authorizations. Reissued general permits may provide automatic coverage for permittees authorized under the previous version of the permit, and no new application is required. Requirements for obtaining authorization under the reissued general permit will be outlined in Part I of the new permit. Permittees authorized to discharge under an expiring general permit should follow the requirements for obtaining coverage under the new general permit to maintain discharge authorization.

6. Permit Action
This permit may be modified, revoked and reissued, or terminated for cause in accordance with LAC 33:IX.2903, 2905, 2907, 3105 and 6509. The causes may include, but are not limited to, the following:

a. Noncompliance by the permittee with any condition of the permit;

b. The permittee's failure in the application or during the permit issuance process to disclose fully all relevant facts, or the permittee's misrepresentation of any relevant facts at any time; or

c. A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination;

d. A change in any condition that requires either a temporary or a permanent reduction or elimination of any discharge;

e. Failure to pay applicable fees under the provisions of LAC 33: IX. Chapter 13;

f. Change of ownership or operational control.

The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

7. Property Rights
This permit does not convey any property rights of any sort, or any exclusive privilege, nor does it authorize any injury to private or public property, nor any infringement of federal, state, or local laws or regulations.

8. Duty to Provide Information
The permittee shall furnish to the state administrative authority, within a reasonable time, any information which the state administrative authority may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the state administrative authority, upon request, copies of records required to be kept by this permit.

9. Criminal and Civil Liability
Except as provided in permit conditions on "Bypassing" and "Upsets", nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance. Any false or materially misleading representation or concealment of information required to be reported by the provisions of the permit, the Act, or applicable regulations, which avoids or effectively defeats the regulatory purpose of the Permit may subject the Permittee to criminal enforcement pursuant to La. R.S. 30:2025.

10. Oil and Hazardous Substance Liability
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Clean Water Act.

11. State Laws
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the Clean Water Act.

12. Severability
If any provision of these rules and regulations, or the application thereof, is held to be invalid, the remaining provisions of these rules and regulations shall not be affected, so long as they can be given effect without the invalid provision. To this end, the provisions of these rules and regulations are declared to be severable.

13. Dilution
A permittee shall not achieve any effluent concentration by dilution unless specifically authorized in the permit. A permittee shall not increase the use of process water or cooling water or otherwise attempt to dilute a discharge as a partial or complete substitute for adequate treatment to achieve permit limitations or water quality.

14. Facilities Requiring Approval from Other State Agencies
In accordance with La. R.S.40.4(A)(6) the plans and specifications of all sanitary sewerage treatment systems, both public and private, must be approved by the Department of Health and Hospitals state health officer or his designee. It is unlawful for any person, firm, or corporation, both municipal and private to operate a sanitary sewage treatment facility without proper authorization from the state health officer.

In accordance with La. R.S.40.1149, it is unlawful for any person, firm or corporation, both municipal and private, operating a sewerage system to operate that system unless the competency of the operator is duly certified by the Department of Health and Hospitals state health officer. Furthermore, it is unlawful for any person to perform the duties of an operator without being duly certified.

In accordance with La. R.S.48.385, it is unlawful for any industrial wastes, sewage, septic tanks effluent, or any noxious or harmful matter, solid, liquid or gaseous to be discharged into the side or cross ditches or placed upon the rights-of-ways of state highways without the prior written consent of the Department of Transportation and Development chief engineer or his duly authorized representative and of the secretary of the Department of Health and Hospitals.

15. The standards provided in Chapter 11 – Surface Water Quality Standards are official regulations of the state, and any person who discharges pollutants to the waters of the state in such quantities as to cause these standards to be violated shall be subject to the enforcement procedures of the state as specified in R.S. 30:2025.

SECTION B. PROPER OPERATION AND MAINTENANCE

1. Need to Halt or Reduce not a Defense
It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

2. Duty to Mitigate
The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment. The permittee shall also take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with the permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

3. Proper Operation and Maintenance
   a. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up

or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

b. The permittee shall provide an adequate operating staff which is duly qualified to carry out operation, maintenance and other functions necessary to ensure compliance with the conditions of this permit.

4. Bypass of Treatment Facilities
   a. ***Bypass***. The intentional diversion of waste streams from any portion of a treatment facility.

   b. Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Section B.4.c. and 4.d of these standard conditions.

   c. Notice
      (1) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice to the Office of Environmental Services, Water Permits Division, if possible at least ten days before the date of the bypass.

      (2) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in LAC 33:IX.2701.L.6 (24-hour notice) and Section D.6.e. of these standard conditions.

   d. Prohibition of bypass
      (1) Bypass is prohibited, and the state administrative authority may take enforcement action against a permittee for bypass, unless:

         (a) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

         (b) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and,

         (c) The permittee submitted notices as required by Section B.4.c of these standard conditions.

      (2) The state administrative authority may approve an anticipated bypass after considering its adverse effects, if the state administrative authority determines that it will meet the three conditions listed in Section B.4.d(1) of these standard conditions.

5. Upset Conditions
   a. Upset. An exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

   b. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of Section B.5.c. are met. No determination made during administrative review of claims that noncompliance was caused by an upset, and before an action for noncompliance, is final administrative action subject to judicial review.

   c. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
      (1) An upset occurred and that the permittee can identify the cause(s) of the upset;

(2) The permitted facility was at the time being properly operated; and

(3) The permittee submitted notice of the upset as required by LAC 33:IX.2701.L.6.b.ii. and Section D.6.e.(2) of these standard conditions; and

(4) The permittee complied with any remedial measures required by Section B.2 of these standard conditions.

d. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

6. Removed Substances
Solids, sewage sludges, filter backwash, or other pollutants removed in the course of treatment or wastewater control shall be properly disposed of in a manner such as to prevent any pollutant from such materials from entering waters of the state and in accordance with environmental regulations.

7. Percent Removal
For publicly owned treatment works, the 30-day average percent removal for Biochemical Oxygen Demand and Total Suspended Solids shall not be less than 85 percent in accordance with LAC 33:IX.5905.A.3. and B.3. Publicly owned treatment works utilizing waste stabilization ponds/oxidation ponds are not subject to the 85 percent removal rate for Total Suspended Solids.

SECTION C. MONITORING AND RECORDS

1. Inspection and Entry
The permittee shall allow the state administrative authority or an authorized representative (including an authorized contractor acting as a representative of the Administrator), upon the presentation of credentials and other documents as may be required by the law to:

a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit.

Enter upon the permittee's premises where a discharge source is or might be located or in which monitoring equipment or records required by a permit are kept for inspection or sampling purposes. Most inspections will be unannounced and should be allowed to begin immediately, but in no case shall begin more than thirty (30) minutes after the time the inspector presents his/her credentials and announces the purpose(s) of the inspection. Delay in excess of thirty (30) minutes shall constitute a violation of this permit. However, additional time can be granted if the inspector or the Administrative Authority determines that the circumstances warrant such action; and

b. Have access to and copy, at reasonable times, any records that the department or its authorized representative determines are necessary for the enforcement of this permit. For records maintained in either a central or private office that is open only during normal office hours and is closed at the time of inspection, the records shall be made available as soon as the office is open, but in no case later than the close of business the next working day;

c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

d. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act or the Louisiana Environmental Quality Act, any substances or parameters at any location.

e. Sample Collection
(1) When the inspector announces that samples will be collected, the permittee will be given an additional thirty (30) minutes to prepare containers in order to collect duplicates. If the permittee cannot obtain and prepare sample containers within this time, he is considered to have waived his

right to collect duplicate samples and the sampling will proceed immediately. Further delay on the part of the permittee in allowing initiation of the sampling will constitute a violation of this permit.

(2) At the discretion of the administrative authority, sample collection shall proceed immediately (without the additional 30 minutes described in Section C.1.a. above) and the inspector shall supply the permittee with a duplicate sample.

f. It shall be the responsibility of the permittee to ensure that a facility representative familiar with provisions of its wastewater discharge permit, including any other conditions or limitations, be available either by phone or in person at the facility during all hours of operation. The absence of such personnel on-site who are familiar with the permit shall not be grounds for delaying the initiation of an inspection except in situations as described in Section C.1.b. of these standard conditions. The permittee shall be responsible for providing witnesses/escorts during inspections. Inspectors shall abide by all company safety rules and shall be equipped with standard safety equipment (hard hat, safety shoes, safety glasses) normally required by industrial facilities.

g. Upon written request copies of field notes, drawings, etc., taken by department personnel during an inspection shall be provided to the permittee after the final inspection report has been completed.

2. Representative Sampling

Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. All samples shall be taken at the outfall location(s) indicated in the permit. The state administrative authority shall be notified prior to any changes in the outfall location(s). Any changes in the outfall location(s) may be subject to modification, revocation and reissuance in accordance with LAC 33:IX.2903.

3. Retention of Records

Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR 503), the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report, or application. This period may be extended by request of the state administrative authority at any time.

4. Record Contents

Records of monitoring information shall include:

a. The date, exact place, and time of sampling or measurements;
b. The individual(s) who performed the sampling or measurements;
c. The date(s) analyses were performed;
d. The time(s) analyses were begun;
e. The individual(s) who performed the analyses;
f. The analytical techniques or methods used;
g. The results of such analyses; and
h. The results of all quality control procedures.

5. Monitoring Procedures

a. Monitoring results must be conducted according to test procedures approved under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in 40 CFR Part 503, unless other test procedures have been specified in this permit.

b. The permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instruments at intervals frequent enough to insure accuracy of measurements and shall maintain appropriate records of such activities.

c. The permittee or designated laboratory shall have an adequate analytical quality assurance/quality control program to produce defensible data of known precision and accuracy. All quality control

measures shall be assessed and evaluated on an on-going basis and quality control acceptance criteria shall be used to determine the validity of the data. All method specific quality control as prescribed in the method shall be followed. If quality control requirements are not included in the method, the permittee or designated laboratory shall follow the quality control requirements as prescribed in the Approved Edition (40 CFR Part 136) Standard Methods for the Examination of Water and Wastes, Sections 1020A and 1020B. General sampling protocol shall follow guidelines established in the "Handbook for Sampling and Sample Preservation of Water and Wastewater, 1982 "U.S. Environmental Protection Agency. This publication is available from the National Technical Information Service (NTIS), Springfield, VA 22161, Phone number (800) 553-6847. Order by NTIS publication number PB-83-124503.

6. Flow Measurements
Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to insure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than 10% from true discharge rates throughout the range of expected discharge volumes. Guidance in selection, installation, calibration and operation of acceptable flow measurement devices can be obtained from the following references:
   a. "A Guide to Methods and Standards for the Measurement of Water Flow, 1975," U.S. Department of Commerce, National Bureau of Standards. This publication is available from the National Technical Information Service (NTIS), Springfield, VA 22161, Phone number (800) 553-6847. Order by NTIS publication number COM-75-10683.

   b. "Flow Measurement in Open Channels and Closed Conduits, Volumes 1 and 2," U.S. Department of Commerce, National Bureau of Standards. This publication is available from the National Technical Service (NTIS), Springfield, VA, 22161, Phone number (800) 553-6847. Order by NTIS publication number PB-273 535.

   c. "NPDES Compliance Flow Measurement Manual," U.S. Environmental Protection Agency, Office of Water Enforcement. This publication is available from the National Technical Information Service (NTIS), Springfield, VA 22161, Phone number (800) 553-6847. Order by NTIS publication number PB-82-131178.

7. Prohibition for Tampering: Penalties
   a. La. R.S. 30:2025 provides for punishment of any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit.

   b. La. R.S. 30:2076.2 provides for penalties for any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance.

8. Additional Monitoring by the Permittee
If the Permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR Part 136 (See LAC 33:IX.4901) or, in the case of sludge use and disposal, approved under 40 CFR Part 136 (See LAC 33:IX.4901) unless otherwise specified in 40 CFR Part 503, or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the state administrative authority.

9. Averaging of Measurements
Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the state administrative authority in the permit.

10. Laboratory Accreditation
    a. LAC 33:I.Subpart 3, Chapters 45-59 provide requirements for an accreditation program specifically applicable to commercial laboratories, wherever located, that provide chemical analyses, analytical results, or other test data to the department, by contract or by agreement, and the data is:
        (1) Submitted on behalf of any facility, as defined in La. R.S.30:2004;
        (2) Required as part of any permit application;
        (3) Required by order of the department;
        (4) Required to be included on any monitoring reports submitted to the department;
        (5) Required to be submitted by contractor
        (6) Otherwise required by department regulations.

    b. The department laboratory accreditation program, Louisiana Environmental Laboratory Accreditation Program (LELAP) is designed to ensure the accuracy, precision, and reliability of the data generated, as well as the use of department-approved methodologies in generation of that data. Laboratory data generated by commercial environmental laboratories that are not (LELAP) accredited will not be accepted by the department. Retesting of analysis will be required by an accredited commercial laboratory.

       Where retesting of effluent is not possible (i.e. data reported on DMRs for prior month's sampling), the data generated will be considered invalid and in violation of the LPDES permit.

    c. Regulations on the Louisiana Environmental Laboratory Accreditation Program and a list of labs that have applied for accreditation are available on the department website located under DIVISIONS → PERMIT SUPPORT SERVICES → LABORATORY ACCREDITATION at the following link:

       http://www.deq.louisiana.gov

       Questions concerning the program may be directed to (225) 219-9800.

SECTION D. REPORTING REQUIREMENTS

1. Facility Changes
   The permittee shall give notice to the state administrative authority as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:
    a. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b); or

    b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under LAC 33:IX.2703.A.1.

    c. For Municipal Permits. Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to Section 301, or 306 of the CWA if it were directly discharging those pollutants; and any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit. In no case are any new connections, increased flows, or significant changes in influent quality permitted that will cause violation of the effluent limitations specified herein.

2. Anticipated Noncompliance
   The permittee shall give advance notice to the state administrative authority of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

3. Transfers
   This permit is not transferable to any person except after notice to the state administrative authority. The state administrative authority may require modification or revocation and reissuance of the permit to change

the name of the permittee and incorporate such other requirements as may be necessary under the Clean Water Act or the Louisiana Environmental Quality Act. (See LAC 33:IX.2901; in some cases, modification or revocation and reissuance is mandatory.)

A permit may be transferred by the permittee to a new owner or operator only if: (1) the permit has been modified or revoked and reissued (under LAC 33:IX.2903.A.2.b) by the permittee and new owner submitting a Name/Ownership/Operator Change Form (NOC-1 Form) and approved by LDEQ (LAC 33:I.Chapter 19);, or (2) a minor modification made (under LAC 33:IX.2905) to identify the new permittee and incorporate such other requirements as may be necessary under the Clean Water Act and the Louisiana Environmental Quality Act.
The NOC-1 form can be found at the following link: http://www.deq.louisiana.gov/portal/Portals/0/assistance/NOC-1%20FORM%20Jan%2025,%202006.pdf

4. Monitoring Reports
Monitoring results shall be reported at the intervals and in the form specified in narrative portion of the Facility Specific Requirements document or Other Conditions of this permit.

The permittee shall submit properly completed Discharge Monitoring Reports (DMRs) on the form specified in the permit. Preprinted DMRs are provided to majors/92-500s and other designated facilities. Please contact the Permit Compliance Unit concerning preprints. Self-generated DMRs must be pre-approved by the Permit Compliance Unit prior to submittal. Self-generated DMRs are approved on an individual basis. Requests for approval of self-generated DMRs should be submitted to:

Supervisor, Permit Compliance Unit
Office of Environmental Compliance
Post Office Box 4312
Baton Rouge, LA 70821-4312

Copies of blank DMR templates, plus instructions for completing them, and EPA's LPDES Reporting Handbook are available at the department website located at:

http://www.deq.louisiana.gov/portal/Default.aspx?tabid=2276

5. Compliance Schedules
Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

6. Requirements for Notification

a. Emergency Notification
As required by LAC 33.I.3915, in the event of an unauthorized discharge that does cause an emergency condition, the discharger shall notify the hotline (DPS 24-hour Louisiana Emergency Hazardous Materials Hotline) by telephone at (225) 925-6595 (collect calls accepted 24 hours a day) immediately (a reasonable period of time after taking prompt measures to determine the nature, quantity, and potential off-site impact of a release, considering the exigency of the circumstances), but in no case later than one hour after learning of the discharge. (An emergency condition is any condition which could reasonably be expected to endanger the health and safety of the public, cause significant adverse impact to the land, water, or air environment, or cause severe damage to property.) Notification required by this section will be made regardless of the amount of discharge. Prompt Notification Procedures are listed in Section D.6.c. of these standard conditions.

A written report shall be provided within seven calendar days after the notification. The report shall contain the information listed in Section D.6.d. of these standard conditions and any additional information in LAC 33:I.3925.B.

b. Prompt Notification
As required by LAC 33:I.3917, in the event of an unauthorized discharge that exceeds a reportable quantity specified in LAC 33:I.Subchapter E, but does not cause an emergency condition, the discharger shall promptly notify the department within 24 hours after learning of the discharge. Notification should be made to the Office of Environmental Compliance, Surveillance Division Single Point of Contact (SPOC) in accordance with LAC 33:I.3923.

In accordance with LAC 33:I.3923, prompt notification shall be provided within a time frame not to exceed 24 hours and shall be given to the Office of Environmental Compliance, Surveillance Division (SPOC) as follows:

(1) by the Online Incident Reporting screens found at http://www.deq.louisiana.gov/portal/tabid/66/Default.aspx ;or
(2) by e-mail utilizing the Incident Report Form and instructions found at http://www.deq.louisiana.gov/portal/tabid/66/Default.aspx;or
(3) by telephone at (225) 219-3640 during office hours, or (225) 342-1234 after hours and on weekends and holidays.

c. Content of Prompt Notifications. The following guidelines will be utilized as appropriate, based on the conditions and circumstances surrounding any unauthorized discharge, to provide relevant information regarding the nature of the discharge:
(1) the name of the person making the notification and the telephone number where any return calls from response agencies can be placed;
(2) the name and location of the facility or site where the unauthorized discharge is imminent or has occurred, using common landmarks. In the event of an incident involving transport, include the name and address of the transporter and generator;
(3) the date and time the incident began and ended, or the estimated time of continuation if the discharge is continuing;
(4) the extent of any injuries and identification of any known personnel hazards that response agencies may face;
(5) the common or scientific chemical name, the U.S. Department of Transportation hazard classification, and the best estimate of amounts of any and all discharged pollutants;
(6) a brief description of the incident sufficient to allow response agencies to formulate their level and extent of response activity.

d. Written Notification Procedures. Written reports for any unauthorized discharge that requires notification under Section D.6.a. or 6.b., or shall be submitted by the discharger to the Office of Environmental Compliance, Surveillance Division SPOC in accordance with LAC 33:I.3925 within seven calendar days after the notification required by D.6.a. or 6.b., unless otherwise provided for in a valid permit or other department regulation. Written notification reports shall include, but not be limited to, the following information:
(1) the name, address, telephone number, Agency Interest (AI) number (number assigned by the department) if applicable, and any other applicable identification numbers of the person, company, or other party who is filing the written report, and specific identification that the report is the written follow-up report required by this section;
(2) the time and date of prompt notification, the state official contacted when reporting, the name of person making that notification, and identification of the site or facility, vessel, transport vehicle, or storage area from which the unauthorized discharge occurred;
(3) date(s), time(s), and duration of the unauthorized discharge and, if not corrected, the anticipated time it is expected to continue;
(4) details of the circumstances (unauthorized discharge description and root cause) and events leading to any unauthorized discharge, including incidents of loss of sources of radiation, and if the release point is subject to a permit:
    (a) the current permitted limit for the pollutant(s) released;and
    (b) the permitted release point/outfall ID.

(5) the common or scientific chemical name of each specific pollutant that was released as the result of an unauthorized discharge, including the CAS number and U.S. Department of Transportation hazard classification, and the best estimate of amounts of any and all released pollutants (total amount of each compound expressed in pounds, including calculations);
(6) a statement of the actual or probable fate or disposition of the pollutant or source of radiation and what off-site impact resulted;
(7) remedial actions taken, or to be taken, to stop unauthorized discharges or to recover pollutants or sources of radiation.
(8) Written notification reports shall be submitted to the Office of Environmental Compliance, Surveillance Division SPOC by mail or fax. The transmittal envelope and report or fax cover page and report should be clearly marked "**UNAUTHORIZED DISCHARGE NOTIFICATION REPORT.**"

Written reports (LAC 33:I.3925) should be mailed to:

Louisiana Department of Environmental Quality
Post Office Box 4312
Baton Rouge, LA 70821-4312
ATTENTION: EMERGENCY AND RADIOLOGICAL SERVICES DIVISION – SPOC
"UNAUTHORIZED DISCHARGE NOTIFICATION REPORT"

The Written Notification Report may also be faxed to the Louisiana Department of Environmental Quality, Office of Environmental Compliance, Emergency and Radiological Services Division at: (225)-219-4044.

Please see LAC 33:I.3925.B for additional written notification procedures.

e. Twenty-four Hour Reporting. The permittee shall report any noncompliance which may endanger human health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within five days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The following shall be included as information which must be reported within 24hours:
(1) Any unanticipated bypass which exceeds any effluent limitation in the permit (see LAC 33:IX.2701.M.3.b.);
(2) Any upset which exceeds any effluent limitation in the permit;
(3) Violation of a maximum daily discharge limitation for any of the pollutants listed by the state administrative authority in Other Conditions of the permit to be reported within 24 hours (LAC 33:IX.2707.G.).

7. Other Noncompliance
The permittee shall report all instances of noncompliance not reported under Section D.4., 5., and 6., at the time monitoring reports are submitted. The reports shall contain the information listed in Section D.6.e.

8. Other Information
Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the state administrative authority, it shall promptly submit such facts or information.

9. Discharges of Toxic Substances
In addition to the reporting requirements under Section D.1-8, all existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Office of Environmental Services, Water Permits Division as soon as they know or have reason to believe:
a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant:

i. listed at LAC 33:IX.7107, Tables II and III (excluding Total Phenols) which is not limited in the permit, if that discharge will exceed the highest of the following notification levels:
(1) One hundred micrograms per liter (100 µg/L);
(2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,4 -dinitro-phenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
(3) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with LAC33:IX.2501.G.7; or
(4) The level established by the state administrative authority in accordance with LAC 33:IX.2707.F; or

ii. which exceeds the reportable quantity levels for pollutants at LAC 33:I. Subchapter E.

b. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant:
i. listed at LAC 33:IX.7107, Tables II and III (excluding Total Phenols) which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

(1) Five hundred micrograms per liter (500 µg/L);
(2) One milligram per liter (1 mg/L) for antimony;
(3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with LAC 33:IX.2501.G.7; or
(4) The level established by the state administrative authority in accordance with LAC 33:IX.2707.F; or

ii. which exceeds the reportable quantity levels for pollutants at LAC 33:I. Subchapter E.

10. Signatory Requirements
All applications, reports, or information submitted to the state administrative authority shall be signed and certified.
a. All permit applications shall be signed as follows:
(1) For a corporation - by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:
(a) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation; or,
(b) The manager of one or more manufacturing, production, or operating facilities, provided: the manager is authorized to make management decisions that govern the operation of the regulated facility, including having the explicit or implicit duty of making major capital investment recommendations and initiating and directing other comprehensive measures to ensure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and the authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

NOTE: DEQ does not require specific assignments or delegations of authority to responsible corporate officers identified in Section D.10.a(1)(a). The agency will presume that these responsible corporate officers have the requisite authority to sign permit applications unless the corporation has notified the state administrative authority to the contrary. Corporate procedures governing authority to sign permit applications may provide for assignment or delegation to applicable corporate positions under Section D.10.a(1)(b) rather than to specific individuals.

(2) For a partnership or sole proprietorship - by a general partner or the proprietor, respectively; or
(3) For a municipality, state, federal, or other public agency - by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a federal agency includes:

(a) The chief executive officer of the agency, or
(b) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

b. All reports required by permits and other information requested by the state administrative authority shall be signed by a person described in Section D.10.a., or by a duly authorized representative of that person. A person is a duly authorized representative only if:
(1) The authorization is made in writing by a person described in Section D.10.a. of these standard conditions;
(2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company, (a duly authorized representative may thus be either a named individual or an individual occupying a named position; and,
(3) The written authorization is submitted to the state administrative authority.

c. Changes to authorization. If an authorization under Section D.10.b. is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Section D.10.b. must be submitted to the state administrative authority prior to or together with any reports, information, or applications to be signed by an authorized representative.

d. Certification. Any person signing a document under Section D.10. a. or b. above, shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

11. Availability of Reports
All recorded information (completed permit application forms, fact sheets, draft permits, or any public document) not classified as confidential information under La. R.S. 30:2030(A) and 30:2074(D) and designated as such in accordance with these regulations (LAC 33:IX.2323 and LAC 33:IX.6503) shall be made available to the public for inspection and copying during normal working hours in accordance with the Public Records Act, La. R.S. 44:1 et seq.

Claims of confidentiality for the following will be denied:
a. The name and address of any permit applicant or permittee;
b. Permit applications, permits, and effluent data.
c. Information required by LPDES application forms provided by the state administrative authority under LAC 33:IX.2501 may not be claimed confidential. This includes information submitted on the forms themselves and any attachments used to supply information required by the forms.

SECTION E. PENALTIES FOR VIOLATIONS OF PERMIT CONDITION

1. Criminal
a. Negligent Violations
The Louisiana Revised Statutes La. R. S. 30:2076.2 provides that any person who negligently violates any provision of the LPDES, or any order issued by the secretary under the LPDES, or any permit condition or limitation implementing any such provision in a permit issued under the LPDES by the secretary, or any requirement imposed in a pretreatment program approved under the LPDES is subject

to a fine of not less than $2,500 nor more than $25,000 per day of violation, or by imprisonment for not more than 1 year, or both. If a conviction of a person is for a violation committed after a first conviction of such person, he shall be subject to a fine of not more than $50,000 per day of violation, or imprisonment of not more than two years, or both.

b. Knowing Violations
The Louisiana Revised Statutes La. R. S. 30:2076.2 provides that any person who knowingly violates any provision of the LPDES, or any permit condition or limitation implementing any such provisions in a permit issued under the LPDES, or any requirement imposed in a pretreatment program approved under the LPDES is subject to a fine of not less than $5,000 nor more than $50,000 per day of violation, or imprisonment for not more than 3 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person, he shall be subject to a fine of not more than $100,000 per day of violation, or imprisonment of not more than six years, or both.

c. Knowing Endangerment
The Louisiana Revised Statutes La. R. S. 30:2076.2 provides that any person who knowingly violates any provision of the LPDES, or any order issued by the secretary under the LPDES, or any permit condition or limitation implementing any of such provisions in a permit issued under the LPDES by the secretary, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than $250,000, or by imprisonment for not more than 15 years, or both. A person which is an organization shall, upon conviction of violating this Paragraph, be subject to a fine of not more than one million dollars. If a conviction of a person is for a violation committed after a first conviction of such person under this Paragraph, the maximum punishment shall be doubled with respect to both fine and imprisonment.

d. False Statements
The Louisiana Revised Statutes La. R. S. 30:2076.2 provides that any person who knowingly makes any false material statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under the LPDES or who knowingly falsifies, tampers with, or renders inaccurate, any monitoring device or method required to be maintained under the LPDES, shall, upon conviction, be subject to a fine of not more than $10,000, or imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this Subsection, he shall be subject to a fine of not more than $20,000 per day of violation, or imprisonment of not more than 4 years, or both.

2. Civil Penalties
The Louisiana Revised Statutes La. R. S. 30:2025 provides that any person found to be in violation of any requirement of this Subtitle may be liable for a civil penalty, to be assessed by the secretary, an assistant secretary, or the court, of not more than the cost to the state of any response action made necessary by such violation which is not voluntarily paid by the violator, and a penalty of not more than $32,500 for each day of violation. However, when any such violation is done intentionally, willfully, or knowingly, or results in a discharge or disposal which causes irreparable or severe damage to the environment or if the substance discharged is one which endangers human life or health, such person may be liable for an additional penalty of not more than one million dollars.

(**PLEASE NOTE**: These penalties are listed in their entirety in Subtitle II of Title 30 of the Louisiana Revised Statutes.)

SECTION F. DEFINITIONS

All definitions contained in Section 502 of the Clean Water Act shall apply to this permit and are incorporated herein by reference. Additional definitions of words or phrases used in this permit are as follows:

1. Clean Water Act (CWA) means the Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or the Federal Water Pollution Control Act Amendments of 1972) Pub.L.92-500, as amended by Pub.L. 95-217, Pub.L. 95-576, Pub.L. 96-483 and Pub.L. 97-117, 33 U.S.C. 1251 et. seq.).

2. Accreditation means the formal recognition by the department of a laboratory's competence wherein specific tests or types of tests can be accurately and successfully performed in compliance with all minimum requirements set forth in the regulations regarding laboratory accreditation.

3. Administrator means the Administrator of the U.S. Environmental Protection Agency, or an authorized representative.

4. Applicable Standards and Limitations means all state, interstate and federal standards and limitations to which a discharge is subject under the Clean Water Act, including, effluent limitations, water quality standards of performance, toxic effluent standards or prohibitions, best management practices, and pretreatment standards under Sections 301, 302, 303, 304, 306, 307, 308 and 403.

5. Applicable water quality standards means all water quality standards to which a discharge is subject under the Clean Water Act.

6. Commercial Laboratory means any laboratory, wherever located, that performs analyses or tests for third parties for a fee or other compensation and provides chemical analyses, analytical results, or other test data to the department. The term commercial laboratory does not include laboratories accredited by the Louisiana Department of Health and Hospitals in accordance with La. R.S.49:1001 et seq.

7. Daily Discharge means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in terms of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the sampling day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the average measurement of the pollutant over the sampling day. Daily discharge determination of concentration made using a composite sample shall be the concentration of the composite sample.

8. Daily Maximum discharge limitation means the highest allowable "daily discharge".

9. Director means the U.S. Environmental Protection Agency Regional Administrator, or the state administrative authority, or an authorized representative.

10. Domestic septage means either liquid or solid material removed from a septic tank, cesspool, portable toilet, Type III marine sanitation device, or similar treatment works that receives only domestic sewage. Domestic septage does not include liquid or solid material removed from a septic tank, cesspool, or similar treatment works that receives either commercial wastewater or industrial wastewater and does not include grease removed from grease trap at a restaurant.

11. Domestic sewage means waste and wastewater from humans, or household operations that is discharged to or otherwise enters a treatment works.

12. Environmental Protection Agency or (EPA) means the U.S. Environmental Protection Agency.

13. Grab sample means an individual sample collected over a period of time not exceeding 15 minutes, unless more time is needed to collect an adequate sample, and is representative of the discharge.

14. Industrial user means a nondomestic discharger, as identified in 40 CFR 403, introducing pollutants to a publicly owned treatment works.

15. LEQA means the Louisiana Environmental Quality Act.

16. Louisiana Pollutant Discharge Elimination System (LPDES) means those portions of the Louisiana Environmental Quality Act and the Louisiana Water Control Law and all regulations promulgated under their authority which are deemed equivalent to the National Pollutant Discharge Elimination System (NPDES)

under the Clean Water Act in accordance with Section 402 of the Clean Water Act and all applicable federal regulations.

17. Monthly Average, other than for fecal coliform bacteria, discharge limitations are calculated as the sum of all "daily discharge(s)" measured during a calendar month divided by the number of "daily discharge(s)" measured during that month. When the permit establishes monthly average concentration effluent limitations or conditions, and flow is measured as continuous record or with a totalizer, the monthly average concentration means the arithmetic average (weighted by flow) of all "daily discharge(s)" of concentration determined during the calendar month where C = daily discharge concentration, F = daily flow and n = number of daily samples; monthly average discharge =

$$\frac{C_1F_1 + C_2F_2 + \ldots + C_nF_n}{F_1 + F_2 + \ldots + F_n}$$

When the permit establishes monthly average concentration effluent limitations or conditions, and the flow is not measured as a continuous record, then the monthly average concentration means the arithmetic average of all "daily discharge(s)" of concentration determined during the calendar month.

The monthly average for fecal coliform bacteria is the geometric mean of the values for all effluent samples collected during a calendar month.

18. National Pollutant Discharge Elimination System (NPDES) means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under Sections 307, 318, 402, and 405 of the Clean Water Act.

19. Severe property damage means substantial physical damage to property, damage to the treatment facilities that causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

20. Sewage sludge means any solid, semi-solid, or liquid residue removed during the treatment of municipal wastewater or domestic sewage. *Sewage sludge* includes, but is not limited to, solids removed during primary, secondary, or advanced wastewater treatment, scum, domestic septage, portable toilet pumpings, Type III marine sanitation device pumpings (33 CFR Part 159), and sewage sludge products. *Sewage sludge* does not include grit or screenings, or ash generated during the incineration of sewage sludge.

21. Stormwater Runoff—aqueous surface runoff including any soluble or suspended material mobilized by naturally occurring precipitation events.

22. Surface Water: all lakes, bays, rivers, streams, springs, ponds, impounding reservoirs, wetlands, swamps, marshes, water sources, drainage systems and other surface water, natural or artificial, public or private within the state or under its jurisdiction that are not part of a treatment system allowed by state law, regulation, or permit.

23. Treatment works means any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage and industrial wastes of a liquid nature to implement Section 201 of the Clean Water Act, or necessary to recycle or reuse water at the most economical cost over the estimated life of the works, including intercepting sewers, sewage collection systems, pumping, power and other equipment, and their appurtenances, extension, improvement, remodeling, additions, and alterations thereof. (See Part 212 of the Clean Water Act)

24. For fecal coliform bacteria, a sample consists of one effluent grab portion collected during a 24-hour period at peak loads.

25. The term MGD shall mean million gallons per day.

26. The term GPD shall mean gallons per day.

27. The term mg/L shall mean milligrams per liter or parts per million (ppm).

28. The term SPC shall mean Spill Prevention and Control. Plan covering the release of pollutants as defined by the Louisiana Administrative Code (LAC 33:IX.Chapter 9).

29. The term SPCC shall mean Spill Prevention Control and Countermeasures Plan. Plan covering the release of pollutants as defined in 40 CFR Part 112.

30. The term µg/L shall mean micrograms per liter or parts per billion (ppb).

31. The term ng/L shall mean nanograms per liter or parts per trillion (ppt).

32. Visible Sheen: a silvery or metallic sheen, gloss, or increased reflectivity; visual color; or iridescence on the water surface.

33. Wastewater—liquid waste resulting from commercial, municipal, private, or industrial processes. Wastewater includes, but is not limited to, cooling and condensing waters, sanitary sewage, industrial waste, and contaminated rainwater runoff.

34. Waters of the State: for the purposes of the Louisiana Pollutant Discharge Elimination system, all surface waters within the state of Louisiana and, on the coastline of Louisiana and the Gulf of Mexico, all surface waters extending there from three miles into the Gulf of Mexico. For purposes of the Louisiana Pollutant Discharge Elimination System, this includes all surface waters which are subject to the ebb and flow of the tide, lakes, rivers, streams, (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, natural ponds, impoundments of waters within the state of Louisiana otherwise defined as "waters of the United States" in 40 CFR 122.2, and tributaries of all such waters. "Waters of the state" does not include waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the Clean Water Act, 33 U.S.C. 1251 et seq.

35. Weekly average, other than for fecal coliform bacteria, is the highest allowable arithmetic mean of the daily discharges over a calendar week, calculated as the sum of all "daily discharge(s)" measured during a calendar week divided by the number of "daily discharge(s)" measured during that week. When the permit establishes weekly average concentration effluent limitations or conditions, and flow is measured as continuous record or with a totalizer, the weekly average concentration means the arithmetic average (weighted by flow) of all "daily discharge(s)" of concentration determined during the calendar week where C = daily discharge concentration, F = daily flow and n = number of daily samples; weekly average discharge

$$= \frac{C_1F_1 + C_2F_2 + \ldots + C_nF_n}{F_1 + F_2 + \ldots + F_n}$$

When the permit establishes weekly average concentration effluent limitations or conditions, and the flow is not measured as a continuous record, then the weekly average concentration means the arithmetic average of all "daily discharge(s)" of concentration determined during the calendar week.

The weekly average for fecal coliform bacteria is the geometric mean of the values for all effluent samples collected during a calendar week.

36. Sanitary Wastewater Term(s):

    a. 3-hour composite sample consists of three effluent portions collected no closer together than one hour (with the first portion collected no earlier than 10:00 a.m.) over the 3-hour period and composited according to flow, or a sample continuously collected in proportion to flow over the 3-hour period.

b. 6-hour composite sample consists of six effluent portions collected no closer together than one hour (with the first portion collected no earlier than 10:00 a.m.) over the 6-hour period and composited according to flow, or a sample continuously collected in proportion to flow over the 6-hour period.

c. 12-hour composite sample consists of 12 effluent portions collected no closer together than one hour over the 12-hour period and composited according to flow, or a sample continuously collected in proportion to flow over the 12-hour period. The daily sampling intervals shall include the highest flow periods.

d. 24-hour composite sample consists of a minimum of 12 effluent portions collected at equal time intervals over the 24-hour period and combined proportional to flow or a sample continuously collected in proportion to flow over the 24-hour period.

FACT SHEET

as required by LAC 33:IX.3111, for draft **Louisiana Pollutant Discharge Elimination System Permit No. LA0042188; AI 19267; PER20120001** to discharge to waters of the **State of Louisiana** as per LAC 33:IX.2311.

The **permitting authority** for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

I. THE APPLICANT IS:

City of Shreveport
North Regional Wastewater Treatment Plant
Post Office Box 31109
Shreveport, Louisiana 71130

II. PREPARED BY: Ronda Burtch

DATE PREPARED: January 17, 2013

III. PERMIT ACTION: reissue LPDES permit LA0042188, AI 19267; PER20120001

LPDES application received: May 30, 2012

EPA has not retained enforcement authority.

Previous LPDES permit effective: December 1, 2007
Previous LPDES permit modified: February 1, 2008*
Previous LPDES permit expired: November 30, 2012

* The permit was modified to change the month in which to publish the list of Industrial Users and to change the month in which the annual updated pretreatment program status report is due.

IV. FACILITY INFORMATION:

A. The application is for the discharge of treated sanitary wastewater from a publicly owned treatment works serving part of the City of Shreveport.

B. The permit application does indicate the receipt of industrial wastewater. The industrial dischargers include:

Name of Discharger	Flow
The Kansas City Southern Railway Company (KCSR)	0.0946 MGD
International Paper	0.0016 MGD (Batch discharge)

C. The facility is located at 2303 North Regional Road in Shreveport, Caddo Parish.

D. Wastewater enters the plant through a 60-inch gravity sewer main and discharges into the influent wetwell.[1] Six inclined, enclosed screw pumps carry the incoming wastewater up to the headworks which consists of an overflow box[2], two perforated in-channel screens, and two grit removal units. Headworks effluent flows through a 42-inch pipe to the aeration basin structure. The aeration basin structure consists of two treatment trains, each with three bioselector cells and four aeration zones. Effluent from the final aeration zone flows through a 48-inch pipe to the splitter box where flow is distributed to the two final clarifiers. From the final clarifiers, flow goes to a two channel UV disinfection facility and then to the effluent pump station which consists of five vertical turbine pumps.

[1] During wet weather events, influent flows over a weir set at elevation 146.5 in the diversion box and into the high rate clarifier influent pump station. The high rate clarifier influent pump station

contains two in-channel perforated screens and three vertical turbine solids handling pumps. After oxidation ditch 1 reaches a set elevation, flow is sent to the high rate clarifier for treatment. The effluent from the high rate clarifier blends with effluent from the final clarifiers in the UV influent box for disinfection.

[2] The gate at the overflow box may be opened to allow flow into three flow equalization basins for temporary storage.

Waste sludge from the final clarifiers is stored in two sludge holding basins. Two sludge transfer pumps pull sludge from the sludge holding basins and send it to two belt filter presses for dewatering. Processed sludge is hauled to the City's biosolids treatment facility and is processed into Class EQ biosolids (sludge may also be occasionally hauled to the City's Woolworth Road Landfill for disposal). Screenings and grit removed at the headworks is hauled to Woolworth Road Landfill for disposal.

E. External Outfall 001

Discharge Location: at the point of discharge from the final treatment unit, prior to mixing with other waters (Latitude 32° 32′ 59″ North, Longitude 93° 45′ 55″ West)

Description: treated sanitary wastewater

Design Capacity: 7 MGD

Treatment Type: aeration basin with three bioselector cells, four aeration zones, two final clarifiers, and UV disinfection

Type of Flow Measurement which the facility is currently using:

Ultrasonic flow sensor over the effluent weir at the UV disinfection unit

Internal Outfall 101

Discharge Location: at the effluent box of the high rate clarifier

Description: treated sanitary wastewater during wet weather events

Design Capacity: 30 MGD

Treatment Type: During peak influent events[1], influent will be diverted to a high rate clarifier, which consists of a flash mixing tank where polymer and micro-sand are added. The water will then enter a maturation zone where it receives further mixing and detention. The decant continues onto the UV disinfection system.

[1] A peak influent event will be defined as an influent flow greater than 14 MGD.

Type of Flow Measurement which the facility is currently using:

Two open channel flow OCM2 meters located in each of the 2 Parshall flumes are used to measure influent flow. A mag meter is used to measure the influent flow to the high rate clarifier. An ultrasonic flow sensor over the effluent weir at the UV disinfection unit is used to measure effluent flow.

Emergency Outfall 002

Discharge Location: at the point of discharge from the high rate clarifier, prior to discharge to Twelve Mile Bayou (Latitude 32° 32' 3" North, Longitude 93° 47' 19" West)

Description: treated sanitary wastewater

Special Conditions: Discharge shall only flow through Outfall 002 during rare extreme rainfall events when the discharge flow is over 22 MGD. The excess flow over 22 MGD will be discharged through Outfall 002. This outfall is expected to be utilized only on very rare occasions.

Although the HRC can treat amounts of effluent up to 30 MGD, the discharge pipeline for Outfall 001 only has the capacity to discharge a flow rate of 28 MGD. Therefore, Outfall 002 was designed to accommodate the excess flow, when necessary.

* **Please note that the previous permit has Outfall 002 being utilized only when the discharge flow is over 28 MGD. However, it has been determined that internal pumping and flow limitations of the plant effectively prevent effluent flow from Outfall 001 from ever reaching 28 MGD, creating a bottleneck which results in the potential for backups and overflows at the plant and in the collection system. Therefore, to alleviate the potential for backups and overflows, the flow rate of 28 MGD has been changed to 22 MGD.**

Type of Flow Measurement which the facility is currently using:

Continuous Recorder

V. RECEIVING WATERS:

The discharge from **External Outfall 001** is into the Red River in Subsegment 100101 of the Red River Basin.

The **critical low flow** (7Q10) of the Red River is 1330 cfs.

The **hardness value** is 186.22 mg/l and the **fifteenth percentile value for TSS** is 22 mg/l.

The designated uses and degree of support for Subsegment 100101 of the Red River Basin are as indicated in the table below[1/]:

Degree of Support of Each Use						
Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
Full	Full	Full	N/A	Full	N/A	Full

1/ The designated uses and degree of support for Subsegment 100101 of the Red River Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2010 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

The discharge from **Emergency Outfall 002** is into Twelve Mile Bayou in Subsegment 100304 of the Red River Basin. This segment is not listed on the 303(d) list of impaired waterbodies.

The **critical low flow** (7Q10) of Twelve Mile Bayou is 2.1 cfs.

The **hardness value** is 78.32 mg/l and the **fifteenth percentile value for TSS** is 9 mg/l.

The designated uses and degree of support for Subsegment 100304 of the Red River Basin are as indicated in the table below[1/]:

Degree of Support of Each Use						
Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
Full	Full	Full	N/A	Full	N/A	Full

1/ The designated uses and degree of support for Subsegment 100304 of the Red River Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2010 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 100101 of the Red River basin has been identified by the U.S. Fish and Wildlife Service (FWS) as habitat for the Pallid sturgeon, which is listed as a threatened/endangered species. LDEQ has determined that the issuance of the LPDES permit is not likely to have an adverse affect upon the Pallid sturgeon since effluent limitations are established in the permit to ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat. As set forth in the Memorandum of Understanding between the LDEQ and the FWS, this draft permit has been sent to the FWS for review.

The receiving waterbody, Subsegment 100304, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated April 5, 2012 from Weller (FWS) to Nolan (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required for Subsegment 100304.

VII. HISTORIC SITES:

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

VIII. PUBLIC NOTICE:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit modification and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Ms. Ronda Burtch
Water Permits Division
Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

IX. PROPOSED PERMIT LIMITS:

Subsegment 100101, Red River-Arkansas State Line to US-165 in Alexandria, is not listed on LDEQ's Final 2010 303(d) List as impaired. A standard reopener clause is included in *Other Conditions* of the permit.

Subsegment 100304, Twelve Mile Bayou-From headwaters to Red River, is not listed on LDEQ's Final 2010 303(d) List as impaired. A standard reopener clause is included in *Other Conditions* of the permit.

Final Effluent Limits:

EXTERNAL OUTFALL 001

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Discharge Limitations				Basis
	lbs/day		mg/l		
	Monthly Avg.	Weekly Avg.	Monthly Avg.	Weekly Avg.	
BOD_5	1,751	---	30	45	Limits are set in accordance with the Statewide Sanitary Effluent Limitations Policy (SSELP) for facilities of this treatment type and size with discharge into the Red River and the previous permit.
TSS	1,751	---	30	45	
Biomonitoring	**Quality (Percent % Unless Stated)**				**Basis**
	Monthly Average Minimum		48-Hour Minimum		
Pimephales promelas	Report		Report		LDEQ/OES Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, Water Quality Management Plan Volume 3, Version 8 (October 26, 2010), and the Best Professional Judgement (BPJ) of the reviewer.
Daphnia pulex	Report		Report		

Other Effluent Limitations:

1) **Fecal Coliform**

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.b.i, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) **pH**

According to LAC 33:IX.3705.A.1., POTWs must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C, the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

3) **Solids and Foam**

There shall be no discharge of floating or settleable solids or visible foam in other than trace amounts, nor of free oil or other oil materials, nor of toxic materials in quantities such as to cause acute toxicity to aquatic organisms. Furthermore, there shall be no visible sheen or stains attributable to this discharge. (LAC 33:IX.1113.B.7)

4) **Toxicity Characteristics**

In accordance with EPA's Region 6 Post-Third Round Toxics Strategy, permits issued to treatment works treating domestic wastewater with a flow (design or expected) greater than or equal to 1 MGD shall require biomonitoring at some frequency for the life of the permit or where available data show resonable potential to cause lethal and/or sub-lethal toxicity, the permit shall require a whole effluent toxicity (WET) limit (*Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards,* October 26, 2010, Version 8).

Whole effluent biomonitoring is the most direct measure of potential toxicity which incorporates the effects of synergism of the effluent components and receiving stream water quality characteristics. Biomonitoring of the effluent is, therefore, required as a condition of this permit to assess potential toxicity. LAC 33:IX.1121.B.3. provides for the use of biomonitoring to monitor the effluent for protection of State waters. The biomonitoring procedures stipulated as a condition of this permit are as follows:

The permittee shall submit the results of any biomonitoring testings performed in accordance with the LPDES Permit No. LA0042188, OTHER CONDITIONS, Section M (Whole Effluent Toxicity Testing) for the organisms indicated below.

TOXICITY TESTS	FREQUENCY
Acute 48 Hour static renewal Definitive Toxicity Test using *Daphnia pulex*	1/quarter[1]
Acute 48 Hour static renewal Definitive Toxicity Test using fathead minnow (*Pimephales promelas*)	1/quarter[1]

[1] If there are no lethal effects demonstrated after the first year of quarterly testing, the permittee may certify fulfillment of the WET testing requirements in writing to the permitting authority. If granted, the biomonitoring frequency for the test species may be reduced to not less than once per year for the less sensitive species (usually *Pimephales promelas*) and not less than twice per year for the

more sensitive species (usually *Daphnia pulex*). Upon expiration of the permit, the biomonitoring frequency for both species shall revert to once per quarter until the permit is re-issued.

Dilution Series - The permit requires five (5) dilutions in addition to the control (0% effluent) to be used in the toxicity tests. These additional concentrations shall be 10%, 13%, 18%, 24%, and 32%. The biomonitoring critical dilution is defined as 24% effluent. Results of all dilutions shall be documented in a full report according to the test method publication mentioned in the Whole Effluent Toxicity Section. This full report shall be submitted to the Office of Environmental Compliance as contained in the Reporting Paragraph located in OTHER CONDITIONS, Section M (Whole Effluent Toxicity Testing) of the permit.

The permit may be reopened to require effluent limits, additional testing, and/or other appropriate actions to address toxicity if biomonitoring data show actual or potential ambient toxicity to be the result of the permittee's discharge to the receiving stream or water body. Modification or revocation of the permit is subject to the provisions of LAC 33:IX.2903. Accelerated or intensified toxicity testing may be required in accordance with Section 308 of the Clean Water Act.

See attached Biomonitoring Recommendation for additional information.

5) Toxic Substances

Due to drinking water supply being a designated use, the permittee shall analyze the final effluent for the presence of the following toxic substances. The MQL is intended as action levels. Should a toxic substance exceed the MQL, the permittee shall determine the source of the substance and take whatever measures necessary to secure abatement in order to protect all drinking water sources downstream of the discharge. The LDEQ Regional Office and all drinking water intakes within five (5) miles downstream of this discharge shall be notified upon detection of any toxic substance above the MQL. Records of any actions taken shall be made available upon request by any duly authorized regional inspectors and/or LDEQ Headquarter representatives.

A report containing the results of the lab analysis indicating if any toxic substances have exceeded the MQL including a brief summary of any abatement taken at the time, must be submitted to this Office within 20 days of completion of the analysis. **The first analysis shall be performed within six months following the effective date of the permit, and every six months thereafter, by a 24-hour composite sample type.**

Reports must be submitted to the following address:

Department of Environmental Quality
Office of Environmental Compliance
Enforcement Division
Post Office Box 4312
Baton Rouge, Louisiana 70821-4312

TOXIC SUBSTANCES

TOXIC SUBSTANCES (CAS NO.)	Required MQL (µg/l)
VOLATILE ORGANIC CHEMICALS	
Acrolein (107-02-8)	50
acrylonitrile (107-13-1)	20
benzene (71-43-2)	10
bromodichloromethane (dichlorobromomethane) (75-27-4)	10

bromoform (tribromomethane) (75-25-2)	10
carbon tetrachloride (56-23-5)	2
chlorobenzene (108-90-7)	10
chloroform (trichloromethane)	10
chloromethane (methyl chloride) (74-87-3)	20
1,1-dichloroethane (75-34-3)	10
1,2-dichloroethane (107-06-2)	10
1,1-dichloroethylene (75-35-4)	10
dichloromethane (methylene chloride) (75-09-2)	20
cis-1,3-dichloropropene	10
trans-1,3-dichloropropene	10
ethylbenzene (100-41-4)	10
para-dichlorobenzene	---
1,1,2,2-tetrachloroethane (79-34-5)	10
tetrachloroethylene (127-18-4)	10
toluene (108-88-3)	10
1,1,1-trichloroethane (71-55-6)	10
1,1,2-trichloroethane (79-00-5)	10
trichloroethylene (79-01-6)	10
vinyl chloride (chloroethylene) (75-01-4)	10
ACID EXTRACTABLE ORGANIC CHEMICALS	
2-chlorophenol (95-57-8)	10
3-chlorophenol	10
4-chlorophenol	10
2,4-dichlorophenol (120-83-2)	10
2,3-dichlorophenol	10
2,5-dichlorophenol	10
2,6-dichlorophenol	10
3,4-dichlorophenol	10
2,4-dinitrophenol (51-28-5)	50
pentachlorophenol (87-86-5)	5
phenol (108-95-2)	10
2,4,6-trichlorophenol (88-06-2)	10
BASE/NEUTRAL EXTRACTABLE ORGANIC CHEMICALS	
anthracene (120-12-7)	10
benzidine (92-87-5)	50
bis(2-chloroethyl)ether (111-44-4)	10
bis(2-chloro-1-methylethyl)ether (39638-32-9)	10
bis(2-ethylhexyl)phthalate (117-81-7)	10
di-n-butyl phthalate (84-74-3)	10
1,3-dichlorobenzene (541-73-1)	10
1,2-dichlorobenzene (95-50-1)	10
1,4-dichlorobenzene (106-46-7)	10
3,3-dichlorobenzidine (91-94-1)	50
diethyl phthalate (84-66-2)	10
dimethyl phthalate (131-11-3)	10
2,4-dinitrotoluene (121-14-2)	10
1,2-diphenylhydrazine (122-66-7)	20
fluoranthene (206-44-0)	10

hexachlorobenzene (118-07-1)	10
hexachlorobutadiene (87-68-3)	10
hexachlorocyclopentadiene (77-47-4)	10
hexachloroethane (67-72-1)	20
isophorone (78-59-1)	10
nitrobenzene (98-95-3)	10
N-nitrosodimethylamine (62-75-9)	50
N-nitrosodiphenylamine (86-30-6)	20
PESTICIDES & PCBs	
aldrin (309-00-2)	0.01
PCB's (Total)	0.2
gamma-BHC (Lindane, Hexachlorocyclohexane) (58-89-9)	0.05
chlordane (57-74-9)	0.2
4,4"DDD (TDE) (72-54-8)	0.1
4,4"DDE (72-55-9)	0.1
4,4"DDT (50-29-3)	0.1
Dieldrin (60-57-1)	0.02
endosulfan I (alpha) (115-29-7)	0.01
endosulfan II (beta) (115-29-7)	0.02
endrin (72-20-8)	0.02
heptachlor (76-44-8)	0.001
methoxychlor	---
2,3,7,8-tetrachlorodibenzo-p-dioxin (1764-01-6)	---
toxaphene (8001-35-2)	0.3
2,4-dichlorophenoxyacetic acid (2,4-D) (94-75-7)	10
2-(2,4,5-trichlorophenoxy)proprionic acid	4
METALS	
antimony (7440-36-0)	60
arsenic (7440-38-2)	5
barium	---
beryllium (7440-41-7)	0.5
cadmium (7440-43-9)	1
chromium III (16065-83-1)	10
chromium VI (7440-47-3)	10
copper (7550-50-8)	3
lead (7439-92-1)	2
flouride	---
mercury (7439-97-6)	0.005
nickel (7440-02-0)	5
nitrate (as N)	---
selenium (7782-49-2)	5
silver (7440-22-4)	0.5
thallium (7440-28-0)	0.5
zinc (7440-66-6)	20
MISCELLANEOUS	
total cyanide	10
total phenols	5

INTERNAL OUTFALL 101 – Peak flow wet weather treatment system, design capacity is 30 MGD

Effluent Characteristics

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs/day)	Weekly Avg. (mg/l)	Weekly Avg. (% Removal)	Basis
BOD_5	11,259	45	65% (min.)	US EPA Region 6 *Strategy for Permitting Discharges of Wet Weather-Related Peak Flows*, December 1998 and in accordance with the previous permit.
TSS	11,259	45	65% (min)	

Other Effluent Limitations:

1) The peak flow treatment system can only be used during wet weather conditions.

2) Discharge Monitoring Reports (DMRs) must contain total daily flow and percentage of flow directed to the peak flow wet weather treatment system, year-to-date count of the number of times and length of times the system has been used, amounts of rainfall on the day of use, and a statement indicating if all treatment units were in use and fully functional during the time of use of the peak flow wet weather system. This report is to be included in the summary section of the DMRs submitted for Internal Outfall 101.

Influent Characteristics

Influent Characteristic	Monthly Avg. (lbs/day)	Weekly Avg. (lbs/day)	Basis
BOD_5	Report	Report	US EPA Region 6 *Strategy for Permitting Discharges of Wet Weather-Related Peak Flows*, December 1998 and in accordance with the previous permit.
TSS	Report	Report	

BOD_5 and TSS shall be monitored for the internal influent and the internal effluent for Internal Outfall 101 daily during wet weather conditions when the peak flow treatment system is used to demonstrate removal efficiency.

EMERGENCY OUTFALL 002* – treated sanitary wastewater into Twelve Mile Bayou when discharge volumes exceed 22 MGD.

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs/day)	Monthly Avg.	Weekly Avg.	Basis
BOD_5	Report	30 mg/l	45 mg/l	Secondary effluent limitations for BOD_5 and TSS are set for this discharge due to the intermittent nature of the dischrage. The discharge will occur only when the effluent discharge from Outfall 001 is above 28 MGD. Limits are also set in accordance with the previous permit.
TSS	Report	30 mg/l	45 mg/l	

* **Discharge from Emergency Outfall 002 can only occur during extreme rainfall events where the discharge from External Outfall 001 would exceed 22 MGD.**

Other Effluent Limitations:

1) **Fecal Coliform**

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.b.i, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) **pH**

According to LAC 33:IX.3705.A.1., POTWs must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C, the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

3) **Solids and Foam**

There shall be no discharge of floating or settleable solids or visible foam in other than trace amounts, nor of free oil or other oil materials, nor of toxic materials in quantities such as to cause acute toxicity to aquatic organisms. Furthermore, there shall be no visible sheen or stains attributable to this discharge. (LAC 33:IX.1113.B.7)

X. PREVIOUS PERMITS:

LPDES Permit No. LA0042188: Effective: December 1, 2007
Modified: February 1, 2008
Expired: November 30, 2012

External Outfall 001 – treated sanitary wastewater

Effluent Characteristic	Discharge Limitations				Monitoring Requirements	
	lb/day		mg/l			
	Monthly Avg.	Weekly Avg.	Monthly Avg.	Weekly Avg.	Frequency	Type
Flow (MGD)	Report	Report	---	---	Continuous	Recorder
BOD_5	1,751	---	30	45	5/week	12 Hr Composite
TSS	1,751	---	30	45	5/week	12 Hr Composite
Fecal Coliform (col/100 ml)	---	---	200	400	5/week	Grab
pH (s.u.)	---	---	6.0 min	9.0 max	5/week	Grab
Toxic Substances (µg/l)	---	---	Report	---	1/6 months	24 Hr Composite
Biomonitoring	**Quality (Percent % Unless Stated)**				**Monitoring Requirements**	
	Monthly Avg. Minimum		48-Hour Minimum		Frequency	Type
Pimephales promelas	Report		Report		1/quarter	24 Hr Composite
Daphnia pulex	Report		Report		1/quarter	24 Hr Composite

Internal Outfall 101 – treated sanitary wastewater during wet weather

Effluent Characteristic	Discharge Limitations				Monitoring Requirements	
	Monthly Avg. (lbs/day)	Weekly Avg. (lbs/day)	Weekly Avg. (mg/l)	Weekly Avg. (% Removal)	Frequency	Type
Flow (MGD)	Report	---	---	---	Continuous	Recorder
BOD_5	11,259	---	45	65% (min)	1/day	12 Hr Composite
TSS	11,259	---	45	65% (min)	1/day	12 Hr Composite

Influent Characteristic	Discharge Limitations				Monitoring Requirements	
	Monthly Avg. (lbs/day)	Weekly Avg. (lbs/day)	Monthly Avg. (mg/l)	Weekly Avg. (mg/l)	Frequency	Type
Flow (MGD)	--	Report	---	---	Continuous	Recorder
BOD_5	Report	Report	---	---	1/day	12 Hr Composite
TSS	Report	Report	---	---	1/day	12 Hr Composite

Emergency Outfall 002 – treated sanitary wastewater only during extreme rainfall events when the discharge flow is over 22 MGD.

Effluent Characteristic	Discharge Limitations				Monitoring Requirements	
	lb/day		mg/l			
	Monthly Avg.	Weekly Avg.	Monthly Avg.	Weekly Avg.	Frequency	Type
Flow (MGD)	Report	Report	---	---	Continuous	Recorder
BOD_5	Report	---	30	45	1/day	12 Hr Composite
TSS	Report	---	30	45	1/day	12 Hr Composite
Fecal Coliform (col/100 ml)	---	---	200	400	1/day	Grab
pH (s.u.)	---	---	6.0 min	9.0 max	1/day	Grab

XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:

A) Inspections

Facility Inspection, June 29, 2011, EDMS Document Number 8048727. The inspection indicated that the WWTP was operating satisfactory and all treatment works were operational.

B) Enforcement Actions

There are no open, pending, or appealed enforcement actions administered against this facility.

C) DMR Review: See attached list of permit exceedances.

D) Company Compliance History: There is no compliance issues with any other facilities owned and/or operated by the City of Shreveport.

E) Permit Actions Taken: N/A

XII. ADDITIONAL INFORMATION:

Reopener Clause

This permit may be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitations issued or approved under sections 301(b)(2)(C) and (D); 304(b)(2); and 307(a)(2) of the Clean Water Act or more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional water quality studies and/or TMDLs, if the effluent standard, limitations, water quality studies or TMDLs so issued or approved:

a) Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or

b) Controls any pollutant not limited in the permit; or

c) Requires reassessment due to change in 303(d) status of waterbody; or

d) Incorporates the results of any total maximum daily load allocation, which may be approved for the receiving water body.

The Louisiana Department of Environmental Quality (LDEQ) reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDLs for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as necessary to achieve compliance with water quality standards. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department

to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

Mass Loading Calculations

Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of External Outfall 001 of 7 MGD.

Effluent loadings are calculated using the following example:

BOD: 8.34 lb/gal x 7 MGD x 30 mg/l = 1,751 lbs/day

Monitoring Frequency Requirements

At present, the Monitoring Requirements, Sample Types, and Frequency of Sampling for **External Outfall 001** as shown in the permit are standard for facilities of flows between **5.00** and **10.00** MGD.

Effluent Characteristics	Monitoring Requirements	
	Measurement Frequency	Sample Type
Flow	Continuous	Recorder
BOD_5	5/week	12 Hr. Composite
Total Suspended Solids	5/week	12 Hr. Composite
Fecal Coliform Bacteria	5/week	Grab
pH	5/week	Grab
Toxic Substances	1/6 months	24 Hr. Composite
Biomonitoring		
Daphnia pulex	1/quarter	24-Hr Composite
Pimephales promelas	1/quarter	24-Hr Composite

At present, the Monitoring Requirements, Sample Types, and Frequency of Sampling for **Internal Outfall 101** as shown in the permit are standard for facilities of flows greater than 10.00 MGD.

Effluent Characteristics	Monitoring Requirements	
	Measurement Frequency	Sample Type
Flow	Continuous	Recorder
BOD_5	1/day	12 Hr. Composite
Total Suspended Solids	1/day	12 Hr. Composite

Influent Characteristics	Monitoring Requirements	
	Measurement Frequency	Sample Type
Flow	Continuous	Recorder
BOD_5	1/day	12 Hr. Composite
Total Suspended Solids	1/day	12 Hr. Composite

The Monitoring Requirements, Sample Types, and Frequency of Sampling for **Emergency Outfall 002** shall be as follows:

Effluent Characteristics	Monitoring Requirements	
	Measurement Frequency	Sample Type
Flow	Continuous	Recorder
BOD_5	1/day	12 Hr. Composite
Total Suspended Solids	1/day	12 Hr. Composite
Fecal Coliform Bacteria	1/day	Grab
pH	1/day	Grab

Please be aware that the Department has the authority to reduce monitoring frequencies when a permittee demonstrates two or more consecutive years of permit compliance. Monitoring frequencies established in LPDES permits are based on a number of factors, including but not limited to, the size of the discharge, the type of wastewater being discharged, the specific operations at the facility, past compliance history, similar facilities and best professional judgment of the reviewer. We encourage and invite each permittee to institute positive measures to ensure continued compliance with the LPDES permit, thereby qualifying for reduced monitoring frequencies upon permit reissuance. As a reminder, the Department will also consider an increase in monitoring frequency upon permit reissuance when the permittee demonstrates continued non-compliance.

Pretreatment Requirements
Based upon consultation with LDEQ pretreatment personnel, Option 2A Pretreatment Language is required for this facility. This language is established for municipalities with industrial users on their collection system and with an approved pretreatment program.

Pollution Prevention Requirements
The permittee shall institute or continue programs directed towards pollution prevention. The permittee shall institute or continue programs to improve the operating efficiency and extend the useful life of the facility. The permittee will complete an annual Environmental Audit Report **each year** for the life of this permit according to the schedule below. The permittee will accomplish this requirement by completing an Environmental Audit Form which has been attached to the permit. All other requirements of the Municipal Wastewater Pollution Prevention Program are contained in OTHER CONDITIONS of the permit.

The audit evaluation period is as follows:

Audit Period Begins	Audit Period Ends	Audit Report Completion Date
Effective Date of Permit	12 Months from Audit Period Beginning Date	3 Months from Audit Period Ending Date

Stormwater Discharges
Because the design flow of the facility is equal to or greater than 1.0 MGD and in accordance with LAC 33:IX.2511.B.14.i, the facility may contain storm water discharges associated with industrial activity. Therefore, in accordance with LAC 33:IX.2511.A.1.b, specific requirements addressing stormwater discharges will be included in the discharge permit.

XIII. TENTATIVE DETERMINATION:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in this Fact Sheet.

XIV. REFERENCES:

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2011.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 2010.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, 2011.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2011.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, City of Shreveport, North Regional Wastewater Treatment Plant, Received May 30, 2012.

City of Shreveport- North Regional WWTP-LA0042188

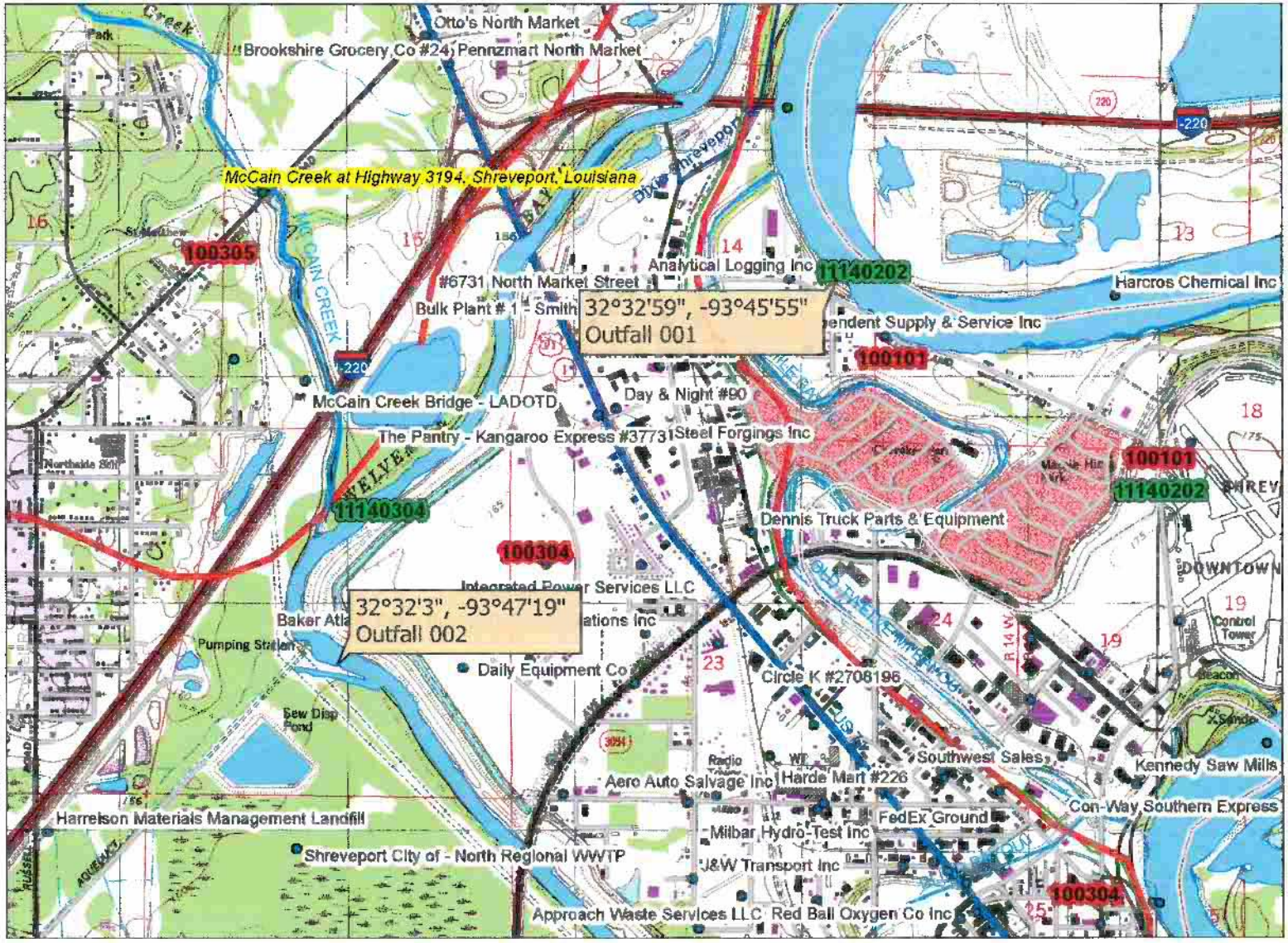
MP End Date	Outfall	STORET	Mon Loc	DMR Field	Parameter	Limit	DMR Value	Units	No. EX	Vio Code
12/31/2010	001-S	51168	1	C1	Priority pollutants scan (yes/no) --- MO AV MN	Report	Not Received	Y=1;N=0		D80
12/31/2010	TX1-Y	TEM6C	1	C1	LF Pass/Fail Statre 48Hr Acute Pimephales Promela --- 48HR MIN	Report	Not Received	pass=0/fail=1		D80
12/31/2010	TX1-Y	TEM6C	1	C2	LF Pass/Fail Statre 48Hr Acute Pimephales Promela --- MO AV MN	Report	Not Received	pass=0/fail=1		D80
12/31/2010	TX1-Y	TOM6C	1	C1	NOEC Lethal Static Renewal 48HR Acute Pimephales promelas --- 48HI	Report	Not Received	%		D80
12/31/2010	TX1-Y	TOM6C	1	C2	NOEC Lethal Static Renewal 48HR Acute Pimephales promelas --- MO A	Report	Not Received	%		D80
12/31/2010	TX1-Y	TQM6C	1	C1	Coef Of Var Statre 48Hr Acute Pimephales --- 48HR MIN	Report	Not Received	%		D80
12/31/2010	TX1-Y	TQM6C	1	C2	Coef Of Var Statre 48Hr Acute Pimephales --- MO AV MN	Report	Not Received	%		D80
06/30/2011	001-S	51168	1	C1	Priority pollutants scan (yes/no) --- MO AV MN	Report	Not Received	Y=1;N=0		D80
08/31/2011	001-A	00400	1	C1	pH --- INST MIN	6	5.8	SU	1	E90
12/31/2011	001-S	51168	1	C1	Priority pollutants scan (yes/no) --- MO AV MN	Report	Not Received	Y=1;N=0		D80
12/31/2011	TX1-S	TEM3D	1	C1	LF Pass/Fail Statre 48Hr Acute Daphnia Pulex --- 48HR MIN	Report	Not Received	pass=0/fail=1		D80
12/31/2011	TX1-S	TEM3D	1	C2	LF Pass/Fail Statre 48Hr Acute Daphnia Pulex --- MO AV MN	Report	Not Received	pass=0/fail=1		D80
12/31/2011	TX1-S	TOM3D	1	C1	NOEC Lethal Static Renewal 48HR Acute Daphnia pulex --- 48HR MIN	Report	Not Received	%		D80
12/31/2011	TX1-S	TOM3D	1	C2	NOEC Lethal Static Renewal 48HR Acute Daphnia pulex --- MO AV MN	Report	Not Received	%		D80
12/31/2011	TX1-S	TQM3D	1	C1	Coef Of Var Statre 48Hr Acute D. Pulex --- 48HR MIN	Report	Not Received	%		D80
12/31/2011	TX1-S	TQM3D	1	C2	Coef Of Var Statre 48Hr Acute D. Pulex --- MO AV MN	Report	Not Received	%		D80
05/31/2012	002-A	00310	1	Q1	BOD, 5-day, 20 deg. C --- MO AVG	Report	NODI=9	lb/d		D80
05/31/2012	002-A	00310	1	C2	BOD, 5-day, 20 deg. C --- MO AVG	30	NODI=9	mg/L		D90
05/31/2012	002-A	00310	1	C3	BOD, 5-day, 20 deg. C --- WKLY AVG	45	NODI=9	mg/L		D90
05/31/2012	002-A	00400	1	C1	pH --- INST MIN	6	NODI=9	SU		D90
05/31/2012	002-A	00400	1	C3	pH --- INST MAX	9	NODI=9	SU		D90
05/31/2012	002-A	00530	1	Q1	Solids, total suspended --- MO AVG	Report	NODI=9	lb/d		D80
05/31/2012	002-A	00530	1	C2	Solids, total suspended --- MO AVG	30	NODI=9	mg/L		D90
05/31/2012	002-A	00530	1	C3	Solids, total suspended --- WKLY AVG	45	NODI=9	mg/L		D90
05/31/2012	002-A	50050	1	Q1	Flow, in conduit or thru treatment plant --- MO AVG	Report	NODI=9	MGD		D80
05/31/2012	002-A	50050	1	Q2	Flow, in conduit or thru treatment plant --- WKLY AVG	Report	NODI=9	MGD		D80

MP End Date	Outfall	STORET	Mon Loc	DMR Field	Parameter	Limit	DMR Value	Units	No. EX	Vio Code
05/31/2012	002-A	74055	1	C2	Coliform, fecal general — MOAV GEO	200	NODI=9	#/100mL		D90
05/31/2012	002-A	74055	1	C3	Coliform, fecal general — WKAV GEO	400	NODI=9	#/100mL		D90
06/30/2012	002-A	00310	1	Q1	BOD, 5-day, 20 deg. C — MO AVG	Report	NODI=9	lb/d		D80
06/30/2012	002-A	00310	1	C2	BOD, 5-day, 20 deg. C — MO AVG	30	NODI=9	mg/L		D90
06/30/2012	002-A	00310	1	C3	BOD, 5-day, 20 deg. C — WKLY AVG	45	NODI=9	mg/L		D90
06/30/2012	002-A	00400	1	C1	pH — INST MIN	6	NODI=9	SU		D90
06/30/2012	002-A	00400	1	C3	pH — INST MAX	9	NODI=9	SU		D90
06/30/2012	002-A	00530	1	Q1	Solids, total suspended — MO AVG	Report	NODI=9	lb/d		D80
06/30/2012	002-A	00530	1	C2	Solids, total suspended — MO AVG	30	NODI=9	mg/L		D90
06/30/2012	002-A	00530	1	C3	Solids, total suspended — WKLY AVG	45	NODI=9	mg/L		D90
06/30/2012	002-A	50050	1	Q1	Flow, in conduit or thru treatment plant — MO AVG	Report	NODI=9	MGD		D80
06/30/2012	002-A	50050	1	Q2	Flow, in conduit or thru treatment plant — WKLY AVG	Report	NODI=9	MGD		D80
06/30/2012	002-A	74055	1	C2	Coliform, fecal general — MOAV GEO	200	NODI=9	#/100mL		D90
06/30/2012	002-A	74055	1	C3	Coliform, fecal general — WKAV GEO	400	NODI=9	#/100mL		D90
07/31/2012	002-A	00310	1	Q1	BOD, 5-day, 20 deg. C — MO AVG	Report	NODI=C	lb/d		D80
07/31/2012	002-A	00310	1	C2	BOD, 5-day, 20 deg. C — MO AVG	30	NODI=C	mg/L		D90
07/31/2012	002-A	00310	1	C3	BOD, 5-day, 20 deg. C — WKLY AVG	45	NODI=C	mg/L		D90
07/31/2012	002-A	00400	1	C1	pH — INST MIN	6	NODI=C	SU		D90
07/31/2012	002-A	00400	1	C3	pH — INST MAX	9	NODI=C	SU		D90
07/31/2012	002-A	00530	1	Q1	Solids, total suspended — MO AVG	Report	NODI=C	lb/d		D80
07/31/2012	002-A	00530	1	C2	Solids, total suspended — MO AVG	30	NODI=C	mg/L		D90
07/31/2012	002-A	00530	1	C3	Solids, total suspended — WKLY AVG	45	NODI=C	mg/L		D90
07/31/2012	002-A	50050	1	Q1	Flow, in conduit or thru treatment plant — MO AVG	Report	NODI=C	MGD		D80
07/31/2012	002-A	50050	1	Q2	Flow, in conduit or thru treatment plant — WKLY AVG	Report	NODI=C	MGD		D80
07/31/2012	002-A	74055	1	C2	Coliform, fecal general — MOAV GEO	200	NODI=C	#/100mL		D90
07/31/2012	002-A	74055	1	C3	Coliform, fecal general — WKAV GEO	400	NODI=C	#/100mL		D90
08/31/2012	001-A	00310	1	Q1	BOD, 5-day, 20 deg. C — MO AVG	1751	Not Received	lb/d		D90
08/31/2012	001-A	00310	1	C2	BOD, 5-day, 20 deg. C — MO AVG	30	Not Received	mg/L		D90

MP End Date	Outfall	STORET	Mon Loc	DMR Field	Parameter	Limit	DMR Value	Units	No. EX	Vio Code
08/31/2012	001-A	00310	1	C3	BOD, 5-day, 20 deg. C — WKLY AVG	45	Not Received	mg/L		D90
08/31/2012	001-A	00400	1	C1	pH — INST MIN	6	Not Received	SU		D90
08/31/2012	001-A	00400	1	C3	pH — INST MAX	9	Not Received	SU		D90
08/31/2012	001-A	00530	1	Q1	Solids, total suspended — MO AVG	1751	Not Received	lb/d		D90
08/31/2012	001-A	00530	1	C2	Solids, total suspended — MO AVG	30	Not Received	mg/L		D90
08/31/2012	001-A	00530	1	C3	Solids, total suspended — WKLY AVG	45	Not Received	mg/L		D90
08/31/2012	001-A	50050	1	Q1	Flow, in conduit or thru treatment plant — MO AVG	Report	Not Received	MGD		D80
08/31/2012	001-A	50050	1	Q2	Flow, in conduit or thru treatment plant — WKLY AVG	Report	Not Received	MGD		D80
08/31/2012	001-A	74055	1	C2	Coliform, fecal general — MOAV GEO	200	Not Received	#/100mL		D90
08/31/2012	001-A	74055	1	C3	Coliform, fecal general — WKAV GEO	400	Not Received	#/100mL		D90
08/31/2012	002-A	00310	1	Q1	BOD, 5-day, 20 deg. C — MO AVG	Report	Not Received	lb/d		D80
08/31/2012	002-A	00310	1	C2	BOD, 5-day, 20 deg. C — MO AVG	30	Not Received	mg/L		D90
08/31/2012	002-A	00310	1	C3	BOD, 5-day, 20 deg. C — WKLY AVG	45	Not Received	mg/L		D90
08/31/2012	002-A	00400	1	C1	pH — INST MIN	6	Not Received	SU		D90
08/31/2012	002-A	00400	1	C3	pH — INST MAX	9	Not Received	SU		D90
08/31/2012	002-A	00530	1	Q1	Solids, total suspended — MO AVG	Report	Not Received	lb/d		D80
08/31/2012	002-A	00530	1	C2	Solids, total suspended — MO AVG	30	Not Received	mg/L		D90
08/31/2012	002-A	00530	1	C3	Solids, total suspended — WKLY AVG	45	Not Received	mg/L		D90
08/31/2012	002-A	50050	1	Q1	Flow, in conduit or thru treatment plant — MO AVG	Report	Not Received	MGD		D80
08/31/2012	002-A	50050	1	Q2	Flow, in conduit or thru treatment plant — WKLY AVG	Report	Not Received	MGD		D80
08/31/2012	002-A	74055	1	C2	Coliform, fecal general — MOAV GEO	200	Not Received	#/100mL		D90
08/31/2012	002-A	74055	1	C3	Coliform, fecal general — WKAV GEO	400	Not Received	#/100mL		D90
08/31/2012	101-A	00310	G	Q1	BOD, 5-day, 20 deg. C — MO AVG	Report	Not Received	lb/d		D80
08/31/2012	101-A	00310	G	Q2	BOD, 5-day, 20 deg. C — WKLY AVG	Report	Not Received	lb/d		D80
08/31/2012	101-A	00310	J	Q1	BOD, 5-day, 20 deg. C — MO AVG	11259	Not Received	lb/d		D90
08/31/2012	101-A	00310	J	C2	BOD, 5-day, 20 deg. C — WKLY AVG	45	Not Received	mg/L		D90
08/31/2012	101-A	00530	G	Q1	Solids, total suspended — MO AVG	Report	Not Received	lb/d		D80
08/31/2012	101-A	00530	G	Q2	Solids, total suspended — WKLY AVG	Report	Not Received	lb/d		D80

MP End Date	Outfall	STORET	Mon Loc	DMR Field	Parameter	Limit	DMR Value	Units	No. EX	Vio Code
08/31/2012	101-A	00530	J	Q1	Solids, total suspended --- MO AVG	11259	Not Received	lb/d		D90
08/31/2012	101-A	00530	J	C2	Solids, total suspended --- WKLY AVG	45	Not Received	mg/L		D90
08/31/2012	101-A	50050	G	Q2	Flow, in conduit or thru treatment plant --- WKLY AVG	Report	Not Received	MGD		D80
08/31/2012	101-A	50050	J	Q1	Flow, in conduit or thru treatment plant --- MO AVG	Report	Not Received	MGD		D80
08/31/2012	101-A	50050	J	Q2	Flow, in conduit or thru treatment plant --- WKLY AVG	Report	Not Received	MGD		D80
08/31/2012	101-A	50076	J	C1	BOD, percent removal (total) --- MN WK AV	65	Not Received	%		D90
08/31/2012	101-A	81011	J	C1	Solids, suspended percent removal --- MN WK AV	65	Not Received	%		D90

LDEQ Interactive Mapping Application (LIMA)



0.8 0 0.42 0.8 Miles

This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.
THIS MAP IS NOT TO BE USED FOR NAVIGATION

Legend

- LDEQ TEMPO Front Gates (Al
- LDOTD Parishes
- LEAU_SITE_LAYER
- LEAU_AMBIENT_WQN_SW_
- GDT_LW_LINEAR_WATER
- GDT_MW_MAJOR_WATER
- GDT_SW_SMALLWATER
- LA_LDEQ_WATERSHEDBAS
- ESRI GDT Streams
- LDEQ Subsegments
- USDA HUC 8-Digit Louisiana
- USGS DLG Intermittent Strean
- USGS DLG Perennial Stream
- USGS DLG Water Polygons
- USGS GNIS Water
- Population > 70,000
- Population < 69,999 > 5,000
- Population < 5,000
- LDOTD Interstate Highways
- LDOTD US Highways
- Tele Atlas State Highways
- Tele Atlas Major Roads
- Tele Atlas Local Roads
- FED_USGS_DRG24K_8BIT
  - Red: Band_1
  - Green: Band_2
  - Blue: Band_3
- FED_USGS_DRG24K_24BIT
  - Red: Band_1
  - Green: Band_2
  - Blue: Band_3
- FED_USGS_DRG24K_24BIT_
  - Red: Band_1

1: 26,429

9/25/2012

APPENDIX A

Stream Flow Characteristics

MEMORANDUM

TO: Ronda Burtch

FROM: Todd Franklin

DATE: September 26, 2012

RE: Stream Flow Characteristics for the Red River, receiving waters for the City of Shreveport / North Regional WWTP (LA0042188 / AI: 19267)

The discharge from Outfall 001 flows into the Red River. Ambient data for hardness and TSS was taken from ambient monitoring station #0120 (Red River at the bridge on I-220, 0.9 miles east of the junction of I-220 and US Highway 71 and 3.0 miles north of Shreveport). The following results were obtained:

Average hardness = 186.22 mg/l
15^{th} percentile TSS = 22 mg/l

The following flow information is based on USGS monitoring station number 7350500 identified as "Red River at Coushatta".

7Q10 = 1330 cfs
Harmonic Mean Flow = 7735 cfs

If you have additional questions or comments, please contact me at 2-3209.

APPENDIX B-1

Water Quality Screen

Developer: Bruce Fielding Time: 11:03 AM

Software: Lotus 4.0 LA0042188; AI 19267

Revision date: 1/20/12

Water Quality Screen for the City of Shreveport / North Regional WWTP

Input variables:

Receiving Water Characteristics:

Receiving Water Name=	Red River
Critical flow (Qr) cfs=	1330
Harm. mean/avg tidal cfs=	7735
Drinking Water=1 HHNPCR=2	1
MW=1, BW=2, 0=n	
Rec. Water Hardness=	186.22
Rec. Water TSS=	22
Fisch/Specific=1,Stream=0	
Diffuser Ratio=	

Effluent Characteristics:

Permittee=	
Permit Number=	LA0042188; AI 19267
Facility flow (Qef),MGD=	7
Outfall Number =	001
Eff. data, 2=lbs/day	
MQL, 2=lbs/day	
Effluent Hardness=	N/A
Effluent TSS=	N/A
WQBL ind. 0=y, 1=n	
Acute/Chr. ratio 0=n, 1=y	1
Aquatic,acute only1=y,0=n	
Page Numbering/Labeling	
Appendix	Appendix B-1
Page Numbers 1=y, 0=n	1
Input Page # 1=y, 0=n	1

Fischer/Site Specific inputs:

Pipe=1,Canal=2,Specific=3	
Pipe width, feet	
ZID plume dist., feet	
MZ plume dist., feet	
HHnc plume dist., feet	
HHc plume dist., feet	

Fischer/site specific dilutions:

F/specific ZID Dilution =	---
F/specific MZ Dilution =	---
F/specific HHnc Dilution=	---
F/specific HHc Dilution=	---

Dilution:

ZID Fs =	0.0333333
MZ Fs =	0.3333333
Critical Qr (MGD)=	859.579
Harm. Mean (MGD)=	4999.1305
ZID Dilution =	0.1963389
MZ Dilution =	0.0238479
HHnc Dilution=	0.0080777
HHc Dilution=	0.0013983
ZID Upstream =	4.0932333
MZ Upstream =	40.932333
MZhhnc Upstream=	122.797
MZhhc Upstream=	714.1615
ZID Hardness=	---
MZ Hardness=	---
ZID TSS=	---
MZ TSS=	---

Multipliers:

WLAa --> LTAa	0.32
WLAc --> LTAc	0.53
LTA a,c-->WQBL avg	1.31
LTA a,c-->WQBL max	3.11
LTA h --> WQBL max	2.38
WQBL-limit/report	2.13
WLA Fraction	1
WQBL Fraction	1

Conversions:

ug/L-->lbs/day Qef	0.05838
ug/L-->lbs/day Qec	0
ug/L-->lbs/day Qr	11.0922
lbs/day-->ug/L Qec	17.129154
lbs/day-->ug/L Qef	17.129154
diss-->tot 1=y0=n	1
Cu diss->tot1=y0=n	1
cfs-->MGD	0.6463

Receiving Stream:

Default Hardness=	25
Default TSS=	10
99 Crit., 1=y, 0=n	1
Old MQL=1, New=0	0

Toxicity Dilution Series:

Biomonitoring dilution:	0.2384795
Dilution Series Factor:	0.75

	Percent Effluent
Dilution No. 1	31.797%
Dilution No. 2	23.8479%
Dilution No. 3	17.8860%
Dilution No. 4	13.4145%
Dilution No. 5	10.0609%

Partition Coefficients; Dissolved-->Total

METALS	FW
Total Arsenic	2.1058478
Total Cadmium	3.6763632
Chromium III	5.1716596
Chromium VI	1
Total Copper	3.323075
Total Lead	6.1956821
Total Mercury	2.8813033
Total Nickel	2.8511339
Total Zinc	4.1596343

Aquatic Life, Dissolved Metal Criteria, ug/L

METALS	ACUTE	CHRONIC
Arsenic	339.8	150
Cadmium	62.365013	1.6318927
Chromium III	913.09652	296.19907
Chromium VI	15.712	10.582
Copper	33.101887	20.896645
Lead	126.18915	4.9174102
Mercury	1.734	0.012
Nickel	2395.0987	265.99493
Zinc	193.82024	176.98727

Site Specific Multiplier Values:

CV =	---
N =	---
WLAa --> LTAa	---
WLAc --> LTAc	---
LTA a,c-->WQBL avg	---
LTA a,c-->WQBL max	---
LTA h --> WQBL max	---

LA0042188; AI 19267

(*1)	(*2)	(*3)	(*4)	(*5)	(*6)	(*7)	(*8)	(*9)	(*10)	(*11)
Toxic	Cu	Effluent	Effluent	MQL	Effluent	95th %	Numerical Criteria			HH
Parameters	Instream	/Tech	/Tech		1=No 95%	estimate	Acute	Chronic	HHDW	Carcinogen
	Conc.	(Avg)	(Max)		0=95 %	Non-Tech	FW	FW		Indicator
	ug/L	ug/L	ug/L	ug/L		ug/L	ug/L	ug/L	ug/L	"C"
NONCONVENTIONAL										
Total Phenols (4AAP)		7.4		5	0	15.762	700	350	5	
3-Chlorophenol				10					0.1	
4-Chlorophenol				10			383	192	0.1	
2,3-Dichlorophenol				10					0.04	
2,5-Dichlorophenol				10					0.5	
2,6-Dichlorophenol				10					0.2	
3,4-Dichlorophenol				10					0.3	
2,4-Dichlorophenocy-acetic acid (2,4-D)				---					100	
2-(2,4,5-Trichlorophen-oxy) propionic acid (2,4,5-TP, Silvex)				---					10	
METALS AND CYANIDE										
Total Arsenic				5			715.56708	315.87717	105.29239	
Total Cadmium				1			229.27644	5.9994303	36.763632	
Chromium III				10			4722.2244	1531.8408	258.58298	
Chromium VI				10			15.712	10.582	50	C
Total Copper		6.11		3	0	13.0143	110.00005	69.441121	3323.075	
Total Lead				2			781.82788	30.46671	309.7841	
Total Mercury		0.112		0.005	0	0.23856	4.99618	0.0345756	5.7626066	
Total Nickel				5			6828.7472	758.38715		
Total Zinc		43.8		20	0	93.294	806.22132	736.20233	20798.171	
Total Cyanide				10			45.9	5.4	663.8	
DIOXIN										
2,3,7,8 TCDD; dioxin				1.0E-05					7.1E-07	C
VOLATILE COMPOUNDS										
Benzene				10			2249	1125	1.1	C
Bromoform				10			2930	1465	3.9	C
Bromodichloromethane				10					0.2	C
Carbon Tetrachloride				2			2730	1365	0.22	C
Chloroform				10			2890	1445	5.3	C
Dibromochloromethane				10					0.39	C
1,2-Dichloroethane				10			11800	5900	0.36	C
1,1-Dichloroethylene				10			1160	580	0.05	C
1,3-Dichloropropylene				10			606	303	9.86	
Ethylbenzene				10			3200	1600	2390	
Methyl Chloride				50			55000	27500		
Methylene Chloride				20			19300	9650	4.4	C
1,1,2,2-Tetrachloro-ethane				10			932	466	0.16	C

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(*1) Toxic Parameters	(*12) WLAa Acute	(*13) WLAc Chronic	(*14) WLAh HHDW	(*15) LTAa Acute	(*16) LTAc Chronic	(*17) LTAh HHDW	(*18) Limiting A,C,HH	(*19) WQBL Avg 001	(*20) WQBL Max 001	(*21) WQBL Avg 001	(*22) WQBL Max 001	(*23) Need WQBL?
	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	lbs/day	lbs/day	
NONCONVENTIONAL												
Total Phenols (4AAP)	3565.2633	14676.317	618.985	1140.8843	7778.4478	618.985	618.985	618.985	1473.1843	36.136344	86.004499	no
3-Chlorophenol	---	---	12.3797	---	---	12.3797	12.3797	12.3797	29.463686	0.7227269	1.72009	no
4-Chlorophenol	1950.7084	8051.008	12.3797	624.22668	4267.0342	12.3797	12.3797	12.3797	29.463686	0.7227269	1.72009	no
2,3-Dichlorophenol	---	---	4.95188	---	---	4.95188	4.95188	4.95188	11.785474	0.2890908	0.688036	no
2,5-Dichlorophenol	---	---	61.8985	---	---	61.8985	61.8985	61.8985	147.31843	3.6136344	8.6004499	no
2,6-Dichlorophenol	---	---	24.7594	---	---	24.7594	24.7594	24.7594	58.927372	1.4454538	3.44018	no
3,4-Dichlorophenol	---	---	37.1391	---	---	37.1391	37.1391	37.1391	88.391058	2.1681807	5.16027	no
2,4-Dichlorophenocy-acetic acid (2,4-D)	---	---	12379.7	---	---	12379.7	12379.7	12379.7	29463.686	722.72689	1720.09	no
2-(2,4,5-Trichlorophen-oxy) propionic acid (2,4,5-TP, Silvex)	---	---	1237.97	---	---	1237.97	1237.97	1237.97	2946.3686	72.272689	172.009	no
METALS AND CYANIDE												
Total Arsenic	3644.5501	13245.467	13034.882	1166.256	7020.0974	13034.882	1166.256	1527.7954	3627.0563	89.192696	211.74755	no
Total Cadmium	1167.7584	251.57011	4551.2273	373.68268	133.33216	4551.2273	133.33216	174.66513	414.66301	10.19695	24.208027	no
Chromium III	24051.391	64233.658	32011.797	7696.4451	34043.839	32011.797	7696.4451	10082.343	23935.944	588.60719	1397.3804	no
Chromium VI	80.024882	443.72795	35758.075	25.607962	235.17581	35758.075	25.607962	33.546431	79.640763	1.9584406	4.6494277	no
Total Copper	560.25594	2911.8282	411386.72	179.2819	1543.269	411386.72	179.2819	234.85929	557.56672	13.711085	32.550745	no
Total Lead	3982.0318	1277.5402	38350.343	1274.2502	677.09633	38350.343	677.09633	886.99619	2105.7696	51.782838	122.93483	no
Total Mercury	25.44671	1.4498373	713.39341	8.1429473	0.7684137	713.39341	0.7684137	1.006622	2.3897667	0.0587666	0.1395146	no
Total Nickel	34780.403	31800.943	---	11129.729	16854.5	---	11129.729	14579.945	34613.457	851.17718	2020.7336	no
Total Zinc	4106.2733	30870.681	2574751.2	1314.0075	16361.461	2574751.2	1314.0075	1721.3498	4086.5632	100.4924	238.57356	no
Total Cyanide	233.77941	226.4346	82176.449	74.809411	120.01034	82176.449	74.809411	98.000329	232.65727	5.7212592	13.582531	no
DIOXIN												
2,3,7,8 TCDD; dioxin	---	---	0.0005078	---	---	0.0005078	0.0005078	0.0005078	0.0012085	2.964E-05	7.055E-05	no
VOLATILE COMPOUNDS												
Benzene	11454.682	47173.875	786.67765	3665.4982	25002.154	786.67765	786.67765	786.67765	1872.2928	45.926241	109.30445	no
Bromoform	14923.174	61430.868	2789.1299	4775.4156	32558.36	2789.1299	2789.1299	2789.1299	6638.129	162.8294	387.53397	no
Bromodichloromethane	---	---	143.0323	---	---	143.0323	143.0323	143.0323	340.41687	8.3502257	19.873537	no
Carbon Tetrachloride	13904.527	57237.635	157.33553	4449.4486	30335.947	157.33553	157.33553	157.33553	374.45856	9.1852482	21.860891	no
Chloroform	14719.444	60592.222	3790.356	4710.2222	32113.877	3790.356	3790.356	3790.356	9021.0472	221.28098	526.64873	no
Dibromochloromethane	---	---	278.91299	---	---	278.91299	278.91299	278.91299	663.8129	16.28294	38.753397	no
1,2-Dichloroethane	60100.153	247400.77	257.45814	19232.049	131122.41	257.45814	257.45814	257.45814	612.75037	15.030406	35.772367	no
1,1-Dichloroethylene	5908.1507	24320.753	35.758075	1890.6082	12889.999	35.758075	35.758075	35.758075	85.104219	2.0875564	4.9683843	no
1,3-Dichloropropylene	3086.4994	12705.497	1220.6384	987.67981	6733.9134	1220.6384	987.67981	1293.8605	3071.6842	75.535579	179.32492	no
Ethylbenzene	16298.347	67091.733	295874.83	5215.4709	35558.619	295874.83	5215.4709	6832.2669	16220.115	398.86774	946.93029	no
Methyl Chloride	280127.83	1153139.2	---	89640.907	611163.76	---	89640.907	117429.59	278783.22	6855.5353	16275.364	no
Methylene Chloride	98299.403	404647.02	3146.7106	31455.809	214462.92	3146.7106	3146.7106	3146.7106	7489.1712	183.70496	437.21782	no
1,1,2,2-Tetrachloro-ethane	4746.8935	19540.467	114.42584	1519.0059	10356.448	114.42584	114.42584	114.42584	272.3335	6.6801805	15.89883	no

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(*1) Toxic Parameters	(*2) Instream Conc. ug/L	(*3) Cu Effluent /Tech (Avg) ug/L	(*4) Effluent /Tech (Max) ug/L	(*5) MQL ug/L	(*6) Effluent 1=No 95% 0=95 %	(*7) 95th % estimate Non-Tech ug/L	(*8) Numerical Criteria Acute FW ug/L	(*9) Chronic FW ug/L	(*10) HHDW ug/L	(*11) HH Carcinogen Indicator "C"
VOLATILE COMPOUNDS (cont'd)										
Tetrachloroethylene				10			1290	645	0.65	C
Toluene				10			1270	635	6100	
1,1,1-Trichloroethane				10			5280	2640	200	
1,1,2-Trichloroethane				10			1800	900	0.56	C
Trichloroethylene				10			3900	1950	2.8	C
Vinyl Chloride				10					1.9	C
ACID COMPOUNDS										
2-Chlorophenol				10			258	129	0.1	
2,4-Dichlorophenol				10			202	101	0.3	
BASE NEUTRAL COMPOUNDS										
Benzidine				50			250	125	0.00008	C
Hexachlorobenzene				5					0.00025	C
Hexachlorabutadiene				10			5.1	1.02	0.09	C
PESTICIDES										
Aldrin		0.0102		0.01	0	0.021726	3		0.00004	C
Hexachlorocyclohexane (gamma BHC, Lindane)				0.05			5.3	0.21	0.11	C
Chlordane				0.2			2.4	0.0043	0.00019	C
4,4'-DDT				0.02			1.1	0.001	0.00019	C
4,4'-DDE				0.1			52.5	10.5	0.00019	C
4,4'-DDD				0.1			0.03	0.006	0.00027	C
Dieldrin				0.02			0.2374	0.0557	0.00005	C
Endosulfan		0.0102		0.1	0	0.021726	0.22	0.056	0.47	
Endrin				0.02			0.0864	0.0375	0.26	
Heptachlor		0.0102		0.01	0	0.021726	0.52	0.0038	0.00007	C
PCB's (Total)		1		0.20	0.00	2.13	2.00	0.014	0.000056	C
Toxaphene				0.3			0.73	0.0002	0.00024	C
Other Parameters:										
Fecal Col.(col/100ml)									400	
Chlorine				33			19	11		
Ammonia										
Chlorides										
Sulfates										
TDS										

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(*1) Toxic Parameters	(*12) WLAa Acute	(*13) WLAc Chronic	(*14) WLAh HHDW	(*15) LTAa Acute	(*16) LTAc Chronic	(*17) LTAh HHDW	(*18) Limiting A,C,HH	(*19) WQBL Avg 001	(*20) WQBL Max 001	(*21) WQBL Avg 001	(*22) WQBL Max 001	(*23) Need WQBL?
	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	lbs/day	lbs/day	
Tetrachloroethylene	6570.271	27046.355	464.85498	2102.4867	14334.568	464.85498	464.85498	464.85498	1106.3548	27.138233	64.588996	no
Toluene	6468.4063	26627.032	755161.7	2069.89	14112.327	755161.7	2069.89	2711.5559	6437.358	158.30064	375.81296	no
1,1,1-Trichloroethane	26892.272	110701.36	24759.4	8605.527	58671.721	24759.4	8605.527	11273.24	26763.189	658.13178	1562.435	no
1,1,2-Trichloroethane	9167.82	37739.1	400.49044	2933.7024	20001.723	400.49044	400.49044	400.49044	953.16725	23.380632	55.645904	no
Trichloroethylene	19863.61	81768.05	2002.4522	6356.3552	43337.067	2002.4522	2002.4522	2002.4522	4765.8362	116.90316	278.22952	no
Vinyl Chloride	---	---	1358.8069	---	---	1358.8069	1358.8069	1358.8069	3233.9603	79.327144	188.7986	no
ACID COMPOUNDS												
2-Chlorophenol	1314.0542	5409.271	12.3797	420.49734	2866.9136	12.3797	12.3797	12.3797	29.463686	0.7227269	1.72009	no
2,4-Dichlorophenol	1028.8331	4235.1657	37.1391	329.2266	2244.6378	37.1391	37.1391	37.1391	88.391058	2.1681807	5.16027	no
BASE NEUTRAL COMPOUNDS												
Benzidine	1273.3083	5241.5417	0.0572129	407.45867	2778.0171	0.0572129	0.0572129	0.0572129	0.1361667	0.0033401	0.0079494	no
Hexachlorobenzene	---	---	0.1787904	---	---	0.1787904	0.1787904	0.1787904	0.4255211	0.0104378	0.0248419	no
Hexachlorabutadiene	25.97549	42.77098	64.364535	8.3121568	22.668619	64.364535	8.3121568	10.888925	25.850808	0.6356955	1.5091702	no
PESTICIDES												
Aldrin	15.2797	---	0.0286065	4.889504	---	0.0286065	0.0286065	0.0286065	0.0680834	0.00167	0.0039747	no
Hexachlorocyclohexane (gamma BHC, Lindane)	26.994137	8.80579	78.667765	8.6381237	4.6670687	78.667765	4.6670687	6.11386	14.514584	0.3569271	0.8473614	no
Chlordane	12.22376	0.180309	0.1358807	3.9116032	0.0955638	0.1358807	0.0955638	0.1251886	0.2972034	0.0073085	0.0173507	no
4,4'-DDT	5.6025567	0.0419323	0.1358807	1.7928181	0.0222241	0.1358807	0.0222241	0.0291136	0.0691171	0.0016997	0.0040351	no
4,4'-DDE	267.39475	440.2895	0.1358807	85.56632	233.35344	0.1358807	0.1358807	0.1358807	0.323396	0.0079327	0.0188799	no
4,4'-DDD	0.152797	0.251594	0.1930936	0.048895	0.1333448	0.1930936	0.048895	0.0640525	0.1520636	0.0037394	0.0088775	no
Dieldrin	1.2091336	2.335631	0.0357581	0.3869227	1.2378844	0.0357581	0.0357581	0.0357581	0.0851042	0.0020876	0.0049684	no
Endosulfan	1.1205113	2.3482107	58.18459	0.3585636	1.2445517	58.18459	0.3585636	0.4697184	1.1151329	0.0274222	0.0651015	no
Endrin	0.4400554	1.5724625	32.18722	0.1408177	0.6334051	32.18722	0.1408177	0.1844712	0.4379431	0.0107694	0.0255671	no
Heptachlor	2.6484813	0.1593429	0.0500613	0.847514	0.0844517	0.0500613	0.0500613	0.0500613	0.1191459	0.0029226	0.0069557	no
PCB's (Total)	10.186467	0.587053	0.039978	3.259669	0.311138	0.039978		0.000000	0.000000	0.000000	0.000000	no
Toxaphene	3.7180603	0.0083865	0.1716388	1.1897793	0.0044448	0.1716388	0.0044448	0.0058227	0.0138234	0.0003399	0.000807	no
Other Parameters:												
Fecal Col.(col/100ml)	---	---	49518.8	---	---	49518.8	49518.8	49518.8	117854.74			no
Chlorine	96.771433	461.25567	---	30.966859	244.4655	---	30.966859	40.566585	96.30693	2.3682772	5.6223986	no
Ammonia	---	---	---	---	---	---	---	---	---	---	---	no
Chlorides	---	---	---	---	---	---	---	---	---	---	---	no
Sulfates	---	---	---	---	---	---	---	---	---	---	---	no
TDS	---	---	---	---	---	---	---	---	---	---	---	no
	---	---	---	---	---	---	---	---	---	---	---	no
	---	---	---	---	---	---	---	---	---	---	---	no

APPENDIX B-2

Documentation and Explanation of Water Quality Screen

APPENDIX B-2
LA0042188, AI No. 19267

Documentation and Explanation of Water Quality Screen and Associated Excel Spreadsheet

Each reference column is marked by a set of parentheses enclosing a number and asterisk, for example (*1) or (*19). These columns represent inputs, existing data sets, calculation points, and results for determining Water Quality Based Limits for an effluent of concern. The following represents a summary of information used in calculating the water quality screen:

Receiving Water Characteristics:

Receiving Water: Red River
Critical Flow, Qrc (cfs): 1,330
Harmonic Mean Flow, Qrh (cfs): 7,735
Segment No.: 100101
Receiving Stream Hardness (mg/L): 186.22
Receiving Stream TSS (mg/L): 22
MZ Stream Factor, Fs: 0.33
Plume distance, Pf: N/A

Effluent Characteristics:

Company: City of Shreveport / North Regional Wastewater Treatment Plant
Facility flow, Qe (MGD): 7
Effluent Hardness: N/A
Effluent TSS: N/A
Pipe/canal width, Pw: N/A
Permit Number: LA0042188

Variable Definition:
Qrc, critical flow of receiving stream, cfs
Qrh, harmonic mean flow of the receiving stream, cfs
Pf = Allowable plume distance in feet, specified in LAC 33.IX.1115.D
Pw = Pipe width or canal width in feet
Qe, total facility flow, MGD
Fs, stream factor from LAC.IX.33.11 (1 for harmonic mean flow)
Cu, ambient concentration, ug/L
Cr, numerical criteria from LAC.IX.1113, Table 1
WLA, wasteload allocation
LTA, long term average calculations
WQBL, effluent water quality based limit
ZID, Zone of Initial Dilution in % effluent
MZ, Mixing Zone in % effluent

Formulas used in aquatic life water quality screen (dilution type WLA):

Streams:

$$\text{Dilution Factor} = \frac{Qe}{(Qrc \times 0.6463 \times Fs + Qe)}$$

$$\text{WLA a,c,h} = \frac{Cr}{\text{Dilution Factor}} - \frac{(Fs \times Qrc \times 0.6463 \times Cu)}{Qe}$$

Static water bodies (in the absence of a site specific dilution):

Discharge from a pipe:

$$\text{Critical Dilution} = \frac{(2.8)\ Pw\ \pi^{1/2}}{Pf}$$

$$WLA = \frac{(Cr-Cu)\ Pf}{(2.8)\ Pw\ \pi^{1/2}}$$

Discharge from a canal:

$$\text{Critical Dilution} = \frac{(2.38)(Pw^{1/2})}{(Pf)^{1/2}}$$

$$WLA = \frac{(Cr-Cu)\ Pf^{1/2}}{2.38\ Pw^{1/2}}$$

Formulas used in human health water quality screen, human health non-carcinogens (dilution type WLA):

Streams:

$$\text{Dilution Factor} = \frac{Qe}{(Qrc \times 0.6463 + Qe)}$$

$$WLA\ a,c,h = \frac{Cr}{\text{Dilution Factor}} - \frac{(Qrc \times 0.6463 \times Cu)}{Qe}$$

Formulas used in human health water quality screen, human health carcinogens (dilution type WLA):

$$\text{Dilution Factor} = \frac{Qe}{(Qrh \times 0.6463 + Qe)}$$

$$WLA\ a,c,h = \frac{Cr}{\text{Dilution Factor}} - \frac{(Qrh \times 0.6463 \times Cu)}{Qe}$$

Static water bodies in the absence of a site specific dilution (human health carcinogens and human health non-carcinogens):

Discharge from a pipe:

$$\text{Critical Dilution} = \frac{(2.8)\ Pw\ \pi^{1/2}}{Pf}$$

$$WLA = \frac{(Cr-Cu)\ Pf^{*}}{(2.8)\ Pw\ \pi^{1/2}}$$

Discharge from a canal:

$$\text{Critical Dilution} = \frac{(2.38)(Pw^{1/2})}{(Pf)^{1/2}}$$

$$WLA = \frac{Cr-Cu)\ Pf^{1/2*}}{2.38\ Pw^{1/2}}$$

* Pf is set equal to the mixing zone distance specified in LAC 33:IX.1115 for the static water body type, i.e., lake, estuary, Gulf of Mexico, etc.

If a site specific dilution is used, WLA are calculated by subtracting Cu from Cr and dividing by the site specific dilution for human health and aquatic life criteria.

$$WLA = \frac{(Cr-Cu)}{\text{site-specific dilution}}$$

Longterm Average Calculations:

LTAa = WLAa X 0.32
LTAc = WLAc X 0.53
LTAh = WLAh

WQBL Calculations:

Select most limiting LTA to calculate daily max and monthly avg WQBL

If aquatic life LTA is more limiting:

Daily Maximum = Min (LTAa, LTAc) X 3.11
Monthly Average = Min (LTAc, LTAc) X 1.31

If human health LTA is more limiting:

Daily Maximum = LTAh X 2.38
Monthly Average = LTAh

Mass Balance Formulas:

mass (lbs/day): (ug/L) X 1/1000 X (flow, MGD) X 8.34 = lbs/day

concentration (ug/L): $\frac{\text{lbs/day}}{\text{(flow, MGD) X 8.34 X 1/1000}}$ = ug/L

The following is an explanation of the references in the spreadsheet.

(*1) Parameter being screened.

(*2) Instream concentration for the parameter being screened in ug/L. In the absence of accurate supporting data, the instream concentration is assumed to be zero (0).

(*3) Monthly average effluent or technology value in concentration units of ug/L or mass units of lbs/day. Units determined on a case-by-case basis as appropriate to the particular situation.

(*4) Daily maximum technology value in concentration units of ug/L or mass units of lbs/day. Units determined on a case-by-case basis as appropriate to the particular situation.

(*5) Minimum analytical Quantification Levels (MQL's). Established in a letter dated January 27, 1994 from Wren Stenger of EPA Region 6 to Kilren Vidrine of LDEQ and from the "Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards". The applicant must test for the parameter at a level at least as sensitive as the specified MQL. If this is not done, the MQL becomes the application value for screening purposes if the pollutant is suspected to be present on-site and/or in the waste stream. Units are in ug/l or lbs/day depending on the units of the effluent data.

(*6) States whether effluent data is based on 95th percentile estimation. A "1" indicates that a 95th percentile approximation is being used, a "0" indicates that no 95th percentile approximation is being used.

(*7) 95th percentile approximation multiplier (2.13). The constant, 2.13, was established in memorandum of understanding dated October 8, 1991 from Jack Ferguson of Region 6 to Jesse Chang of LDEQ and included in the "Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards". This value is screened against effluent Water Quality Based Limits established in columns (*18) - (*21). Units are in ug/l or lbs/day depending on the units of the measured effluent data.

(*8) LAC 33.IX.1113.C.6, Table 1, Numerical Criteria for Specific Toxic Substances, freshwater (FW) or marine water (MW) (whichever is applicable) aquatic life protection, acute criteria. Units are specified. Some metals are hardness dependent. The hardness of the receiving stream shall generally be used, however a flow-weighted hardness may be determined in site-specific situations. Dissolved metals are converted to

Total metals using partition coefficients in accordance with the "Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards". Similar to hardness, the TSS of the receiving stream shall generally be used, however, a flow weighted TSS may be determined in site-specific situations.

Hardness Dependent Criteria:

Metal	Formula
Cadmium	$e^{(1.1280[\ln(\text{hardness})] - 1.6774)}$
Chromium III	$e^{(0.8190[\ln(\text{hardness})] + 3.6880)}$
Copper	$e^{(0.9422[\ln(\text{hardness})] - 1.3884)}$
Lead	$e^{(1.2730[\ln(\text{hardness})] - 1.4600)}$
Nickel	$e^{(0.8460[\ln(\text{hardness})] + 3.3612)}$
Zinc	$e^{(0.8473[\ln(\text{hardness})] + 0.8604)}$

Dissolved to Total Metal Multipliers for Freshwater Streams (TSS dependent):

Metal	Multiplier
Arsenic	$1 + 0.48 \times TSS^{-0.73} \times TSS$
Cadmium	$1 + 4.00 \times TSS^{-1.13} \times TSS$
Chromium III	$1 + 3.36 \times TSS^{-0.93} \times TSS$
Copper	$1 + 1.04 \times TSS^{-0.74} \times TSS$
Lead	$1 + 2.80 \times TSS^{-0.80} \times TSS$
Mercury	$1 + 2.90 \times TSS^{-1.14} \times TSS$
Nickel	$1 + 0.49 \times TSS^{-0.67} \times TSS$
Zinc	$1 + 1.25 \times TSS^{-0.70} \times TSS$

Dissolved to Total Metal Multipliers for Marine Environments (TSS dependent):

Metal	Multiplier
Copper	$1 + (10^{4.86} \times TSS^{-0.72} \times TSS) \times 10^{-6}$
Lead	$1 + (10^{6.06} \times TSS^{-0.85} \times TSS) \times 10^{-6}$
Zinc	$1 + (10^{5.36} \times TSS^{-0.52} \times TSS) \times 10^{-6}$

If a metal does not have multiplier listed above, then the dissolved to total metal multiplier shall be 1.

(*9) LAC 33.IX.1113.C.6, Table 1, Numerical Criteria for Specific Toxic Substances, freshwater (FW) or marine water (MW) (whichever is applicable) aquatic life protection, chronic criteria. Units are specified. Some metals are hardness dependent. The hardness of the receiving stream shall generally be used, however a flow-weighted hardness may be determined in site-specific situations. Dissolved metals are converted to Total metals using partition coefficients in accordance with the "Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards". Similar to hardness, the TSS of the receiving stream shall generally be used, however, a flow weighted TSS may be determined in site-specific situations.

Hardness dependent criteria:

Metal	Formula
Cadmium	$e^{(0.7852[\ln(\text{hardness})] - 3.4900)}$
Chromium III	$e^{(0.8473[\ln(\text{hardness})] + 0.7614)}$
Copper	$e^{(0.8545[\ln(\text{hardness})] - 1.3860)}$
Lead	$e^{(1.2730[\ln(\text{hardness})] - 4.7050)}$
Nickel	$e^{(0.8460[\ln(\text{hardness})] + 1.1645)}$
Zinc	$e^{(0.8473[\ln(\text{hardness})] + 0.7614)}$

Dissolved to total metal multiplier formulas are the same as (*8), acute numerical criteria for aquatic life protection.

(*10) LAC 33.IX.1113.C.6, Table 1, Numerical Criteria for Specific Toxic Substances, human health protection, drinking water supply (HHDW), non-drinking water supply criteria (HHNDW), or human health non-primary contact recreation (HHNPCR) (whichever is applicable). A DEQ and EPA approved Use Attainability Analysis is required before HHNPCR is used, e.g., Monte Sano Bayou. Units are specified.

(*11) C if screened and carcinogenic. If a parameter is being screened and is carcinogenic a "C" will appear in this column.

(*12) Wasteload Allocation for acute aquatic criteria (WLAa). Dilution type WLAa is calculated in accordance with the "Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards". Negative values indicate that the receiving water is not meeting the acute aquatic numerical criteria for that parameter. Units are in ug/L. Dilution WLAa formulas for streams:

$$WLAa = (Cr/\text{Dilution Factor}) - \frac{(Fs \times Qrc \times 0.6463 \times Cu)}{Qe}$$

Dilution WLAa formulas for static water bodies:
WLAa = (Cr-Cu)/Dilution Factor)
Cr represents aquatic acute numerical criteria from column (*8).
If Cu data is unavailable or inadequate, assume Cu=0.
If water quality standards are being applied at end-of-pipe, such as in the case of certain TMDL's, then a blank shall appear in this column.

(*13) Wasteload Allocation for chronic aquatic criteria (WLAc). Dilution type WLAc is calculated in accordance with the "Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards". Negative values indicate that the receiving water is not meeting the chronic aquatic numerical criteria for that parameter. Units are in ug/L. Dilution WLAc formula:

$$WLAc = (Cr/\text{Dilution Factor}) - \frac{(Fs \times Qrc \times 0.6463 \times Cu)}{Qe}$$

Dilution WLAc formulas for static water bodies:
WLAc = (Cr-Cu)/Dilution Factor)
Cr represents aquatic chronic numerical criteria from column (*9).
If Cu data is unavailable or inadequate, assume Cu=0.
If water quality standards are being applied at end-of-pipe, such as in the case of certain TMDL's, then a blank shall appear in this column.

(*14) Wasteload Allocation for human health criteria (WLAh). Dilution type WLAh is calculated in accordance with the "Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards". Negative values indicate that the receiving water is not meeting the human health numerical criteria for that parameter. Units are in ug/L. Dilution WLAh formula:

$$WLAh = (Cr/\text{Dilution Factor}) - \frac{(Fs \times Qrc,Qrh \times 0.6463 \times Cu)}{Qe}$$

Dilution WLAh formulas for static water bodies:
WLAh = (Cr-Cu)/Dilution Factor)
Cr represents human health numerical criteria from column (*10).
If Cu data is unavailable or inadequate, assume Cu=0.
If water quality standards are being applied at end-of-pipe, such as in the case of certain TMDL's, then a blank shall appear in this column.

(*15) Long Term Average for aquatic numerical criteria (LTAa). WLAa numbers are multiplied by a multiplier specified in the "Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards" which is 0.32. WLAa X 0.32 = LTAa.

If water quality standards are being applied at end-of-pipe, such as in the case of certain TMDL's, then a blank shall appear in this column.

(*16) Long Term Average for chronic numerical criteria (LTAc). WLAc numbers are multiplied by a multiplier specified in the "Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards" which is 0.53. WLAc X 0.53 = LTAc.
If water quality standards are being applied at end-of-pipe, such as in the case of certain TMDL's, then a blank shall appear in this column.

(*17) Long Term Average for human health numerical criteria (LTAh). WLAh numbers are multiplied by a multiplier specified in the "Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards" which is 1. WLAc X 1 = LTAh.
If water quality standards are being applied at end-of-pipe, such as in the case of certain TMDL's, then a blank shall appear in this column.

(*18) Limiting Acute, Chronic or Human Health LTA's. The most limiting LTA is placed in this column. Units are consistent with the WLA calculation. If standards are being applied at end-of-pipe, such as in the case of certain TMDL's, then the type of limit, Aquatic or Human Health (HH), is indicated.

(*19) End of pipe Water Quality Based Limit (WQBL) monthly average in terms of concentration, ug/L. If aquatic life criteria was the most limiting LTA then the limiting LTA is multiplied by 1.31 to determine the average WQBL ($LTA_{limiting\ aquatic}$ X 1.31 = $WQBL_{monthly\ average}$). If human health criteria was the most limiting criteria then LTAh = $WQBL_{monthly\ average}$. If water quality standards are being applied at end-of-pipe, such as in the case of certain TMDL's, then either the human health criteria or the chronic aquatic life criteria shall appear in this column depending on which is more limiting.

(*20) End of pipe Water Quality Based Limit (WQBL) daily maximum in terms of concentration, ug/L. If aquatic life criteria was the most limiting LTA then the limiting LTA is multiplied by 3.11 to determine the daily maximum WQBL ($LTA_{limiting\ aquatic}$ X 3.11 = $WQBL_{daily\ max}$). If human health criteria was the most limiting criteria then LTAh is multiplied by 2.38 to determine the daily maximum WQBL ($LTA_{limiting\ aquatic}$ X 2.38 = $WQBL_{daily\ max}$). If water quality standards are being applied at end-of-pipe, such as in the case of certain TMDL's, then either the human health criteria or the acute aquatic life criteria shall appear in this column depending on which is more limiting.

(*21) End of pipe Water Quality Based Limit (WQBL) monthly average in terms of mass, lbs/day. The mass limit is determined by using the mass balance equations above. Monthly average WQBL, ug/l/1000 X facility flow, MGD X 8.34 = monthly average WQBL, lbs/day.

(*22) End of pipe Water Quality Based Limit (WQBL) monthly average in terms of mass, lbs/day. Mass limit is determined by using the mass balance equations above. Daily maximum WQBL, ug/l/1000 X facility flow, MGD X 8.34 = daily maximum WQBL, lbs/day.

(*23) Indicates whether the screened effluent value(s) need water quality based limits for the parameter of concern. A "yes" indicates that a water quality based limit is needed in the permit; a "no" indicates the reverse.

APPENDIX C

Biomonitoring Recommendation

BIOMONITORING FREQUENCY RECOMMENDATION AND RATIONALE FOR ADDITIONAL REQUIREMENTS

Permit Number: **LA0042188**
Facility AI: **19267**
Facility Name: **City of Shreveport/North Regional Wastewater Treatment Plant**
Previous Critical Biomonitoring Dilution: **25% (10:1 ACR)**
Proposed Critical Biomonitoring Dilution: **24% (10:1 ACR)**
Design Flow: **7 mgd**
Receiving stream 7Q10: **1330 cfs**
Date of Review: **10/3/12**
Name of Reviewer: **Laura Thompson**

Recommended Frequency by Species:

***Pimephales promelas* (Fathead minnow): Once/Quarter**[1]
***Daphnia pulex* (water flea): Once/Quarter**[1]

Recommended Dilution Series: **10%, 13%, 18%, 24%, and 32%**

Number of Tests Performed during previous 5 years by Species[2]:

***Pimephales promelas* (Fathead minnow): 8**
***Daphnia pulex* (water flea): 11**

Number of Failed Tests during previous 5 years by Species:

***Pimephales promelas* (Fathead minnow): No failures on file during the past five years**
***Daphnia pulex* (water flea): No failures on file during the past five years**

Failed Test Dates during previous 5 years by Species:

***Pimephales promelas* (Fathead minnow): No failures on file during the past five years**
***Daphnia pulex* (water flea): No failures on file during the past five years**

Previous TRE Activities: **N/A – No previous TRE Activities**

[1] If there are no lethal effects demonstrated after the first year of quarterly testing, the permittee may certify fulfillment of the WET testing requirements in writing to the permitting authority. If granted, the biomonitoring frequency for the test species may be reduced to not less than once per year for the less sensitive species (usually *Pimephales promelas*) and not less than twice per year for the more sensitive species (usually *Daphnia pulex*). Upon expiration of the permit, the biomonitoring frequency for both species shall revert to once per quarter until the permit is re-issued.

[2] Monitoring frequency reduction granted December 18, 2008

Additional Requirements (including WET Limits) Rationale / Comments Concerning Permitting:

The City of Shreveport/North Regional Wastewater Treatment Plant owns and operates an existing publicly owned treatment works serving the city of Shreveport in Caddo Parish, Louisiana. LPDES Permit LA0042188, effective December 1, 2007, contained freshwater acute biomonitoring as an effluent characteristic of Outfall 001 for *Daphnia pulex* and *Pimephales promelas*. The effluent series consisted of 10%, 14%, 19%, 25%, and 33% concentrations, with the 25% effluent concentration being defined as the critical biomonitoring dilution. The testing was to be performed quarterly for *Daphnia pulex* and *Pimephales promelas*. Data on file shows that the permittee has complied with the biomonitoring requirements contained in LA0042188 with no toxicity failures on file during the past five years.

It is recommended that freshwater acute biomonitoring be an effluent characteristic of Outfall 001 (design capacity of 7 mgd of treated sanitary wastewater) in LA0042188. The effluent dilution series shall be 10%, 13%, 18%, 24%, and 32% concentrations, with the 24% effluent concentration being defined as the critical biomonitoring dilution. In accordance with the Environmental Protection Agency (Region 6) WET testing frequency acceleration(s), the biomonitoring frequency shall be once per quarter for *Daphnia pulex* and *Pimephales promelas*. If there are no significant lethal effects demonstrated at or below the critical dilution during the first four quarters of testing, the permittee may certify fulfillment of the WET testing requirements to the permitting authority and WET testing may be reduced to not less than once per six months for the more sensitive species (usually *Daphnia pulex*) and not less than once per year for the less sensitive species (usually *Pimephales promelas*) for the remainder of the term of the permit. Upon expiration of the permit, the monitoring frequency for both test species shall revert to once per quarter until the permit is re-issued.

This recommendation is in accordance with the LDEQ/OES Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, Water Quality Management Plan Volume 3. Version 8 (October 26, 2010), and the Best Professional Judgment (BPJ) of the reviewer.

APPENDIX D

Pretreatment Recommendation

PRETREATMENT EVALUATION AND RECOMMENDATION

FACILIITY NAME: *City of Shreveport – North Regional WWTP*

MUNICIPALITIES/AREAS SERVED: *Shreveport*

PARISH: *Caddo*

PERMIT #: *LA0042188*

DESIGN FLOW: *7.0 MGD*

ESTIMATED OR EXPECTED TREATED WASTEWATER FLOW: *4.8 MGD*

OTHER POTWs IN SYSTEM: *City of Shreveport – Lucas WWTP (LA0041394)*

INDUSTRIES LISTED IN LPDES PERMIT APPLICATION:

Industry Name	Type of Industry	Direct or Indirect Discharger
The Kansas City Southern Railway Company (KCSR)	Rail yard – fueling, maintenance, exterior washing of locomotives	Indirect [1]
International Paper	Apply water-based coating to linerboard	Indirect [2]

STANDARD LANGUAGE RECOMMENDATION AND JUSTIFICATION:

The City of Shreveport began implementing an approved Industrial Pretreatment Program on January 11, 1985. It was tracked under LA0041394 (City of Shreveport – Lucas WWTP). Modifications to the City of Shreveport's pretreatment program occurred on December 1, 1994 to include incorporation of Technically Based Local Limits (TBLLs) and an Emergency Response Plan. LDEQ approved a non-substantial modification to the Pretreatment Program on July 3, 2008. A pretreatment audit of this program was conducted on March 22 – 25, 2010, and it indicated that the program is being implemented in a manner sufficient to regulate the industries listed above.

It is recommended that LDEQ Option 2A Pretreatment Language be included in LPDES Permit LA0042188. This language is established for municipalities with industrial users on their collection system and with an approved pretreatment program. This recommendation is in accordance with 40 CFR Part 403 regulations, the General Pretreatment Regulations for Existing and New Sources of Pollution contained in LAC Title 33, Part IX, Chapter 61 and the Best Professional Judgment (BPJ) of the reviewer.

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1 The discharge is process and sanitary wastewater; however, categorical pretreatment limitations have not been developed for this industry. The CA has permitted this facility as a Significant Industrial User (SIU).

2 The discharge is process and sanitary wastewater; however, pretreatment limitations have not been developed for this industry. The CA classified this industry as a non-significant industrial user on 6/22/11 due to the removal of the printing operations.